FM/AM STEREO RECEIVER

717640

A-522/522L

SERVICE MANUAL

(COMPACT HIFI SYSTEM
UD COMPONENT SYSTEM UD-70)

KENWOOD

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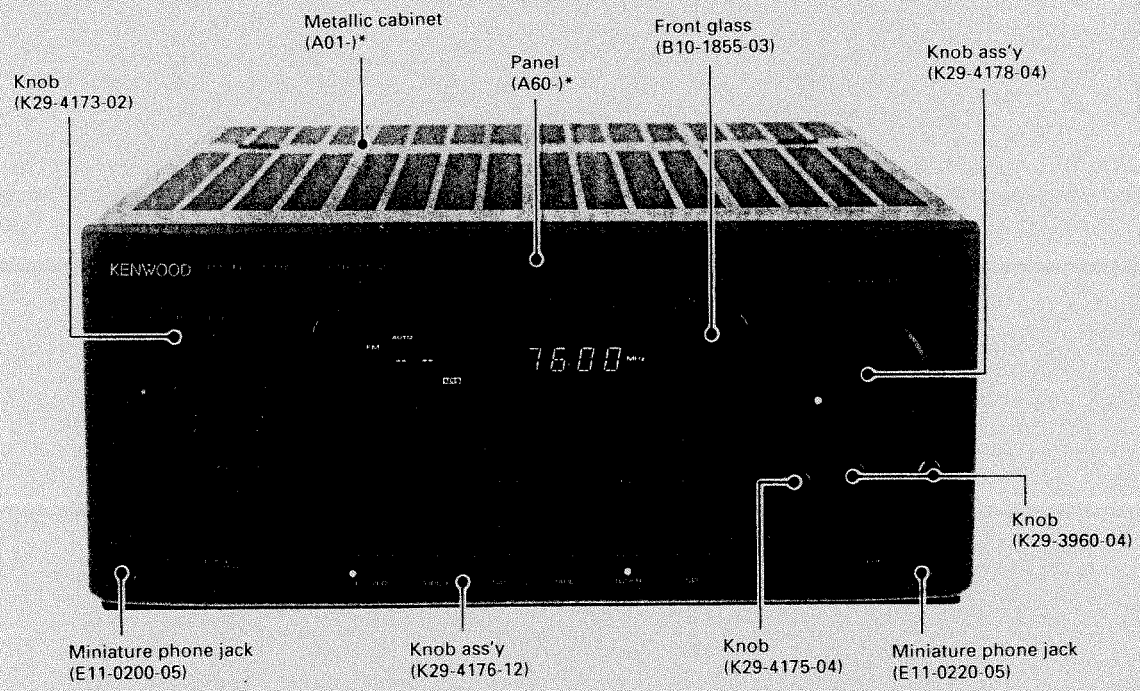

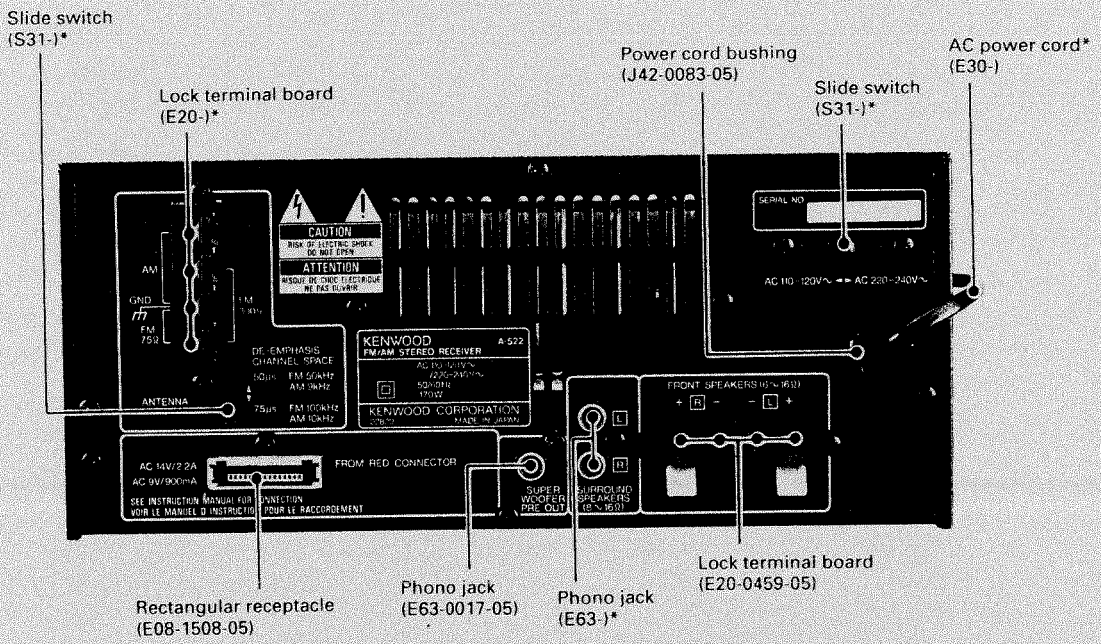

* Refer to parts list on page 33.
Photo is A-522

[A-522 : K, P, Y, M, X type
A-522L : T, E, L type]

Refer to the SERVICING NOTES on page 2 before repair.

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SERVICING NOTES

① This unit does not contain a selector IC. Since each speaker relay of this unit is operated according to the data that is serially transmitted from the graphic equalizer (GE-522), the receiver cannot output sound alone. To output a signal to each speaker terminal, follow the following procedures.

Procedure 1)

Direct the tuner output to the main amplifier input. Connect the test pin on the right (lower right of the tuner board) of the main amplifier board (X09, A/7). (Fig. 1)

Front amplifier	Pins 12 and 10 (Left channel)
	Pins 13 and 11 (Right channel)

Procedure 2)

Enter the test mode. (Hold down the CHARACTER key, and insert the AC plug into the outlet.)

1) Press the DAT key or DBS/LD key. (Only the front speaker outputs sound.)
2) Press the VIDEO key. (The surround mode is entered, and the front and surround speakers outputs sound.)

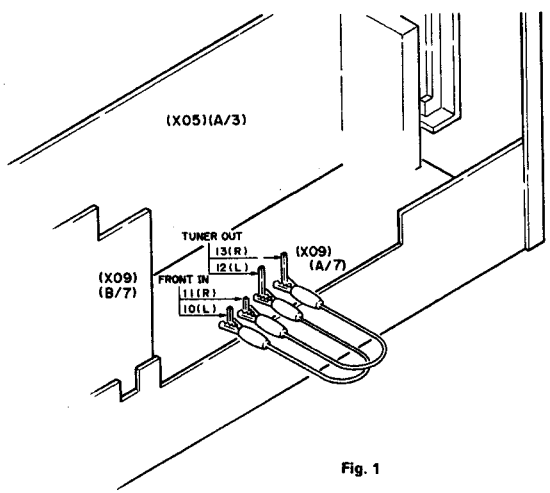
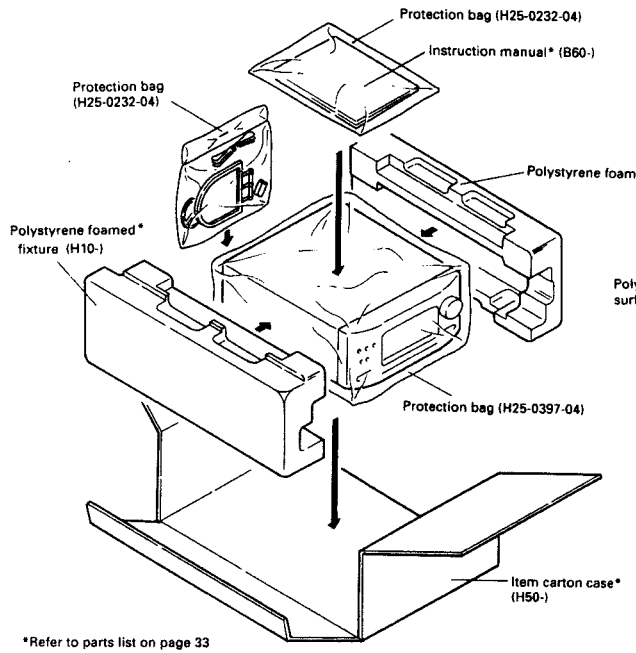


Fig. 1

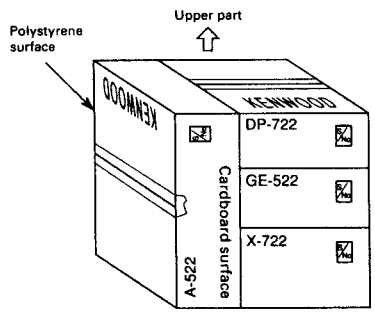
A-522/522L

PACKING/ACCESSORIES

The A-522/522L is supplied with all the accessories, except the remote controller (X94-1000-21) for the GE-522.



*Refer to parts list on page 33

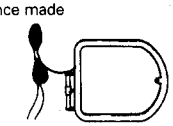


Serial number of system is on box. Arrangement of components as viewed from window in other box

The sleeve method is K, P, Y, M types, and E, X, T, L types are corrugated fiberboard boxes.

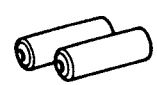
Accessories

- AM (MW, LW) loop antenna 1
  (T90-0173-05): Japan made
  (T90-0174-05): Singapore and France made

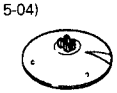


- FM indoor antenna 1
  (T90-0176-05): Japan made
  (T90-0175-05): Singapore and France made

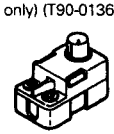
- Batteries 2



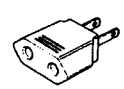
- Loop antenna stand 1
  (J19-2815-04)



- Antenna adaptor (75 Ω/300 Ω) .. 1
  (A-522L only) (T90-0136-05)



- AC plug adaptor 1
  (M type only) (E03-0115-05)



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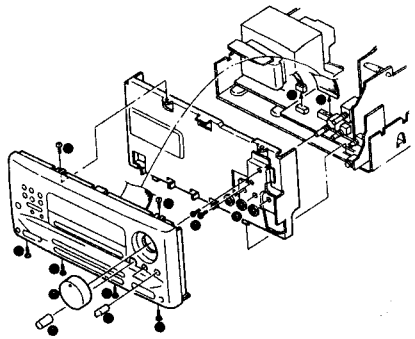
DISASSEMBLY FOR REPAIR

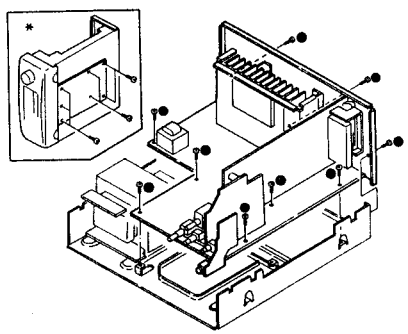
Removing the front panel and sub panel

1. Remove the four knobs●.
2. Remove the six screws●.
   Disconnect the two connectors●, then remove the front panel.
3. Remove the two screws and three nuts●, then remove the sub panel.



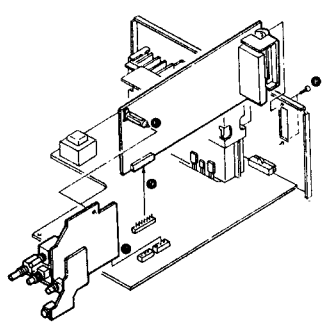
Removing the main PC board (X09: A/7)

4. Remove the nine screws●, then remove the main PC board (X09: A/7).
   * To adjust the main PC board, cover, as shown in the figure.



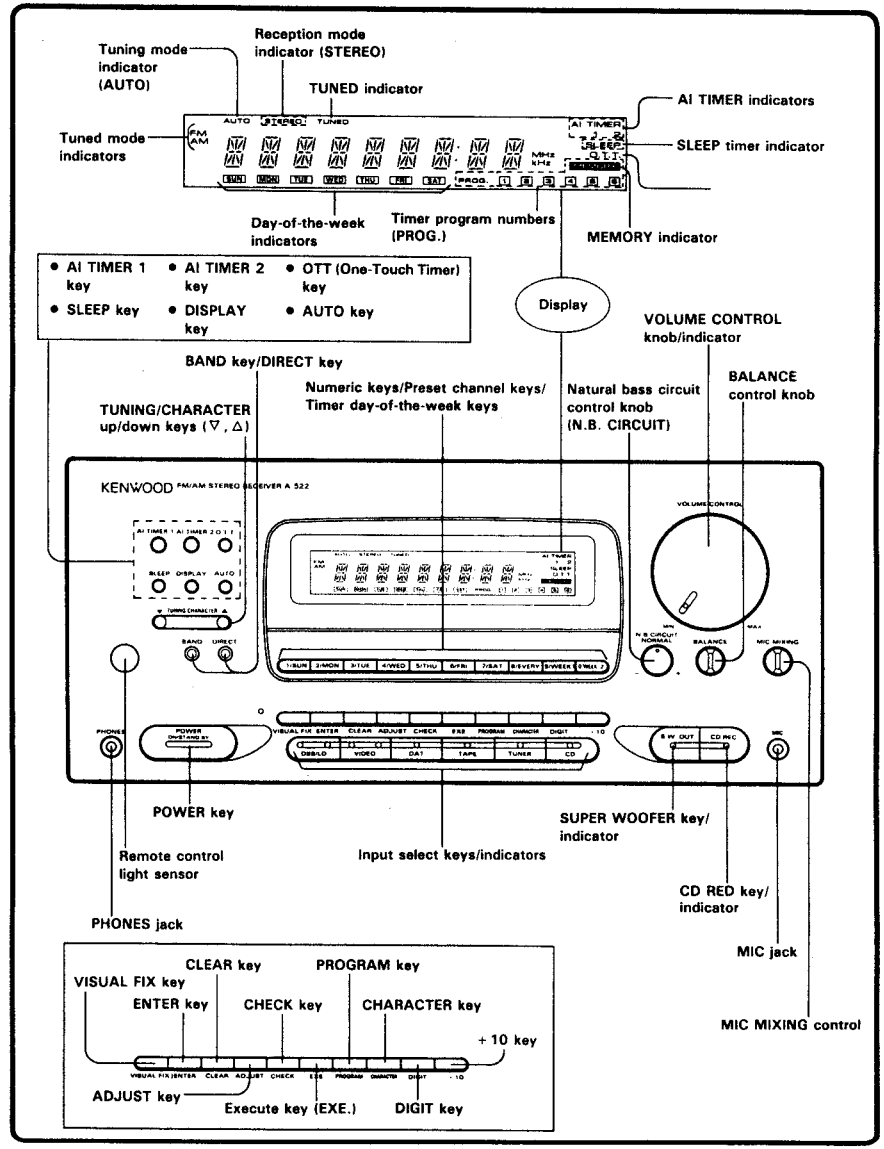
Removing the tuner PC board (X05: A/3) and the volume PC boards (X09: B/7, C/7, D/7)

5. Remove the unit holder 6.
6. Disconnect the volume PC boards (X09: B/7, C/7, D/7) from connector●.
7. Remove the two screws●.
8. Disconnect the tuner PC board (X05: A/3) from connector●.

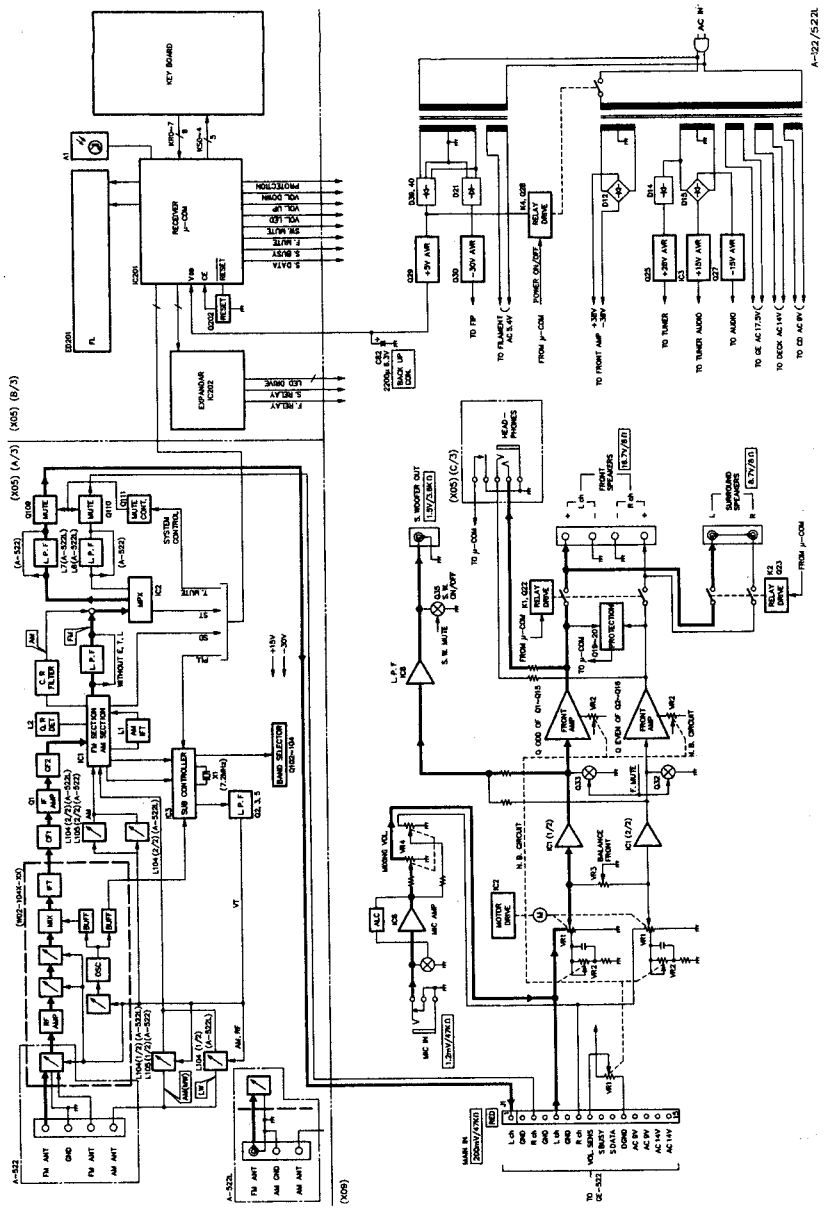


Controls and indicators

■ Receiver



BLOCK DIAGRAM



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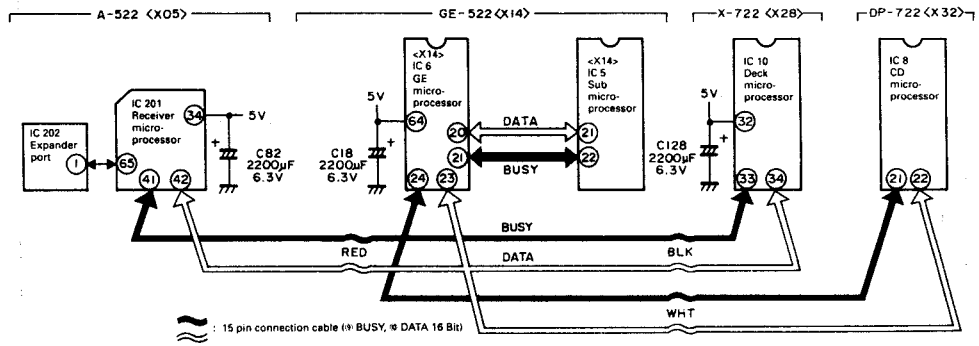
CIRCUIT DESCRIPTION

Microprocessor and back-up condenser of this unit (16-bit serial transmission is supported unlike the UD-7/9 series (8 bits).)



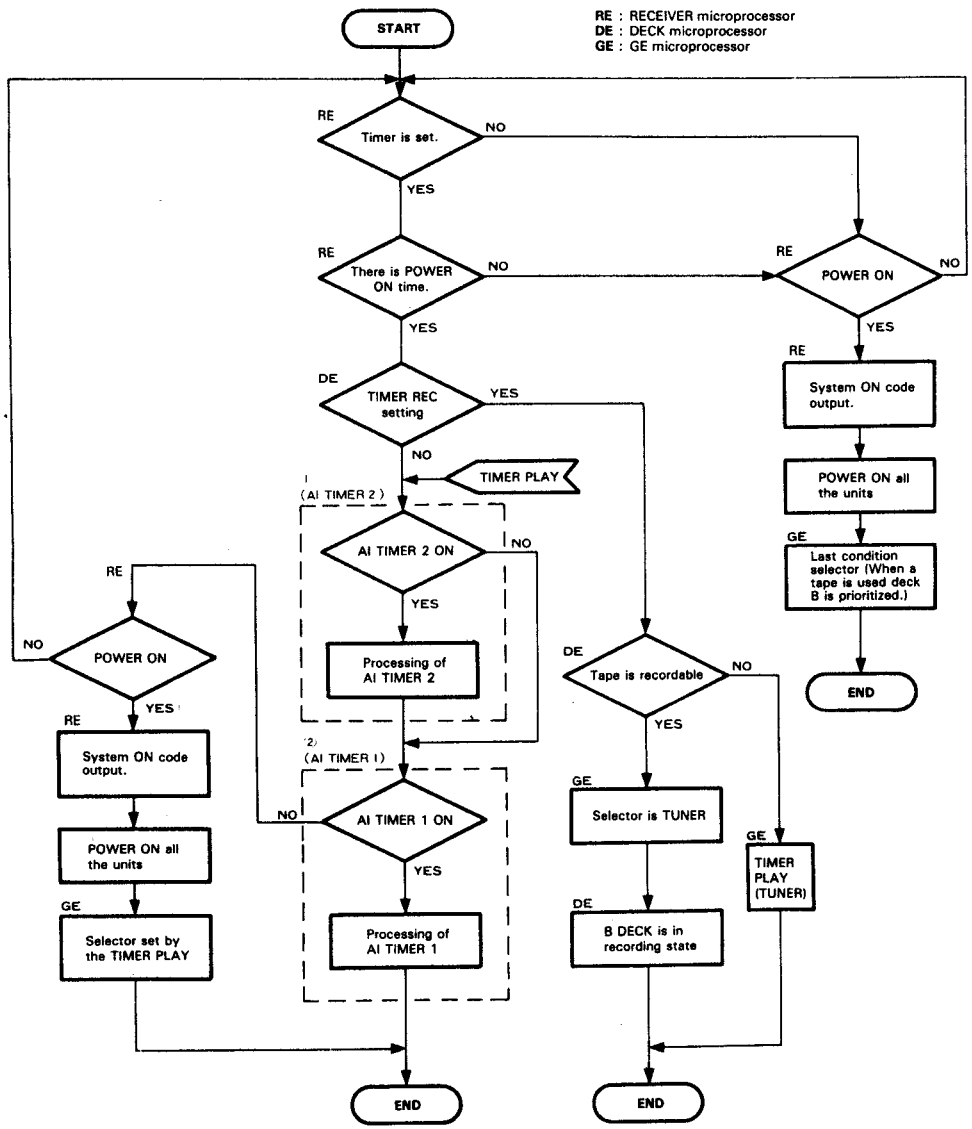
Microprocessor initialization (reset) and test mode

		A-522	GE-522	X-722	DP-722
		RECEIVER microprocessor (X09) IC201 CXP50116-360Q	**GE microprocessor** Main (X14) IC6 M50945-115SP Sub (X14) IC5 M50747-E68SP	**DECK microprocessor (X28) IC10 µPD75112CW-133**	**CD microprocessor (X32) IC8 µPD75216ACW-C26**
Backup condenser		(X05) C82 2200 µF 6.3 V	(X14) C18 2200 µF 6.3 V	(X28) C128 2200 µF 6.3 V	None
Initialization (reset)		Hold down the ENTER key, and insert the AC plug into the outlet.	Hold down the MEMORY key, and turn AC on.	Turn AC off in the CRLS test mode (see below).	Turn AC off again
Test mode	**Operation**	Hold down the CHARACTER key, and insert the AC plug into the outlet.	• Selector test: Hold down the EFFECT key, and turn AC on. • FL all lit test: Hold down the FLAT key, and turn AC on. • Segment test: Hold down the R/M key, and turn AC on.	Short test pin ⑤-⑥, and turn AC on.	See the DP-711 service manual.
	Release	Remove the AC plug from the outlet.	Release — AC off.	Press the PAUSE key.	
	Contents	① All fluorescent displays light. For details, see the service manual for each model.		No fluorescent display.	

CIRCUIT DESCRIPTION

Operation of UD-70 system

The flow chart from power on through sound generation



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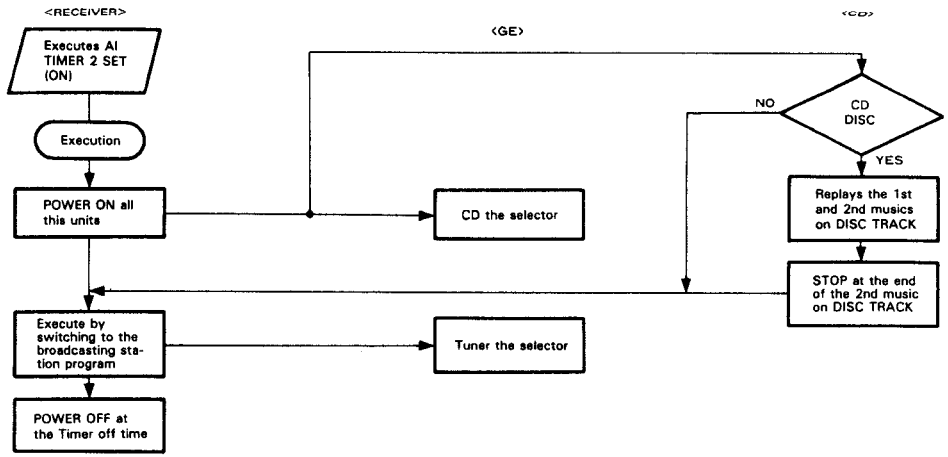
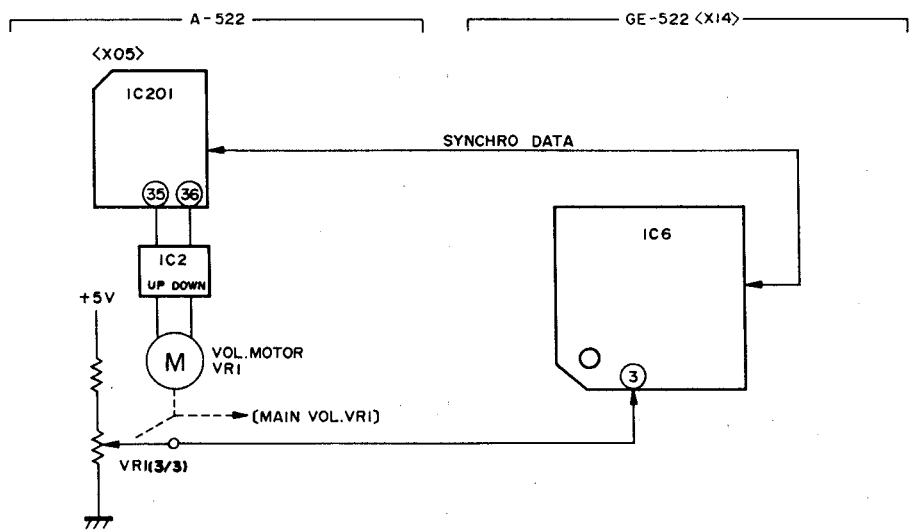
CIRCUIT DESCRIPTION

① Flow chart of AI TIMER 2

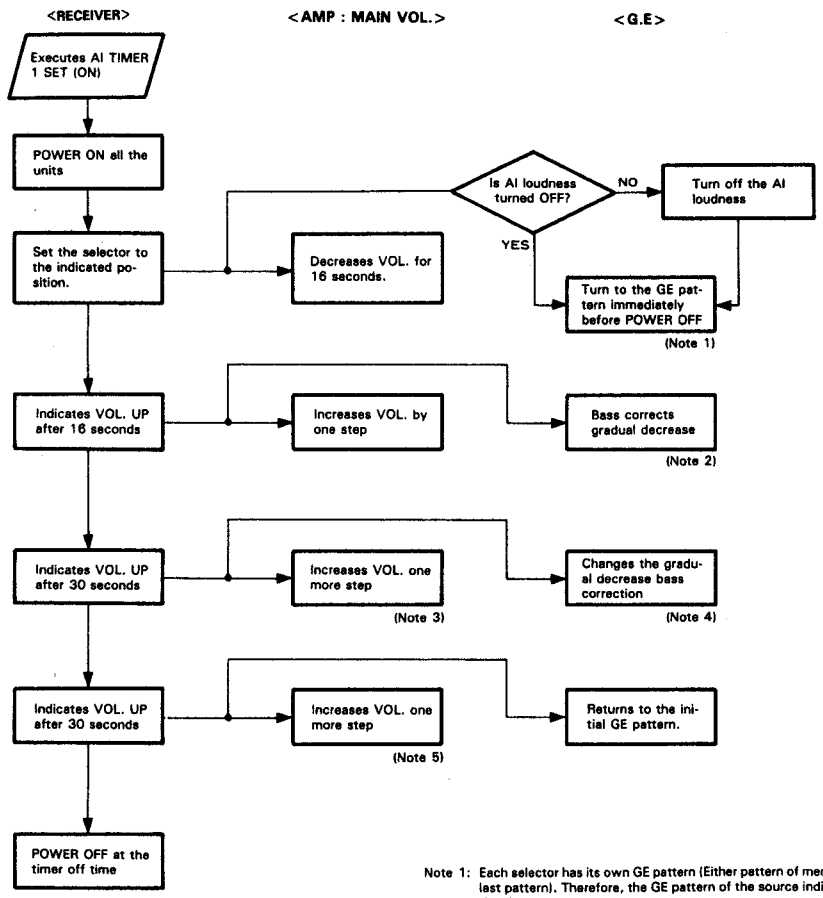

<RECEIVER>
<GE>
<CD>
Executes AI TIMER 2 SET (ON)
Execution
POWER ON all this units
CD the selector
CD DISC
NO
YES
Replays the 1st and 2nd musics on DISC TRACK
STOP at the end of the 2nd music on DISC TRACK
Execute by switching to the broadcasting station program
Tuner the selector
POWER OFF at the Timer off time

Operation of AI TIMER 2



CIRCUIT DESCRIPTION

② Indication flow of AI TIMER 1


<RECEIVER>
<AMP : MAIN VOL.>
<G.E>
Executes AI TIMER 1 SET (ON)
POWER ON all the units
Is AI loudness turned OFF?
NO
Turn off the AI loudness
YES
Set the selector to the indicated position.
Decreases VOL. for 16 seconds.
Turn to the GE pattern immediately before POWER OFF
(Note 1)
Indicates VOL. UP after 16 seconds
Increases VOL. by one step
Bass corrects gradual decrease
(Note 2)
Indicates VOL. UP after 30 seconds
Increases VOL. one more step
(Note 3)
Changes the gradual decrease bass correction
(Note 4)
Indicates VOL. UP after 30 seconds
Increases VOL. one more step
(Note 5)
Returns to the initial GE pattern.
POWER OFF at the timer off time

Note 1: Each selector has its own GE pattern (Either pattern of memory and last pattern). Therefore, the GE pattern of the source indicated by the timer appears.
Note 2: Shifts to the pattern which has the loudness effect (There are two patterns of the gradual decrease bass correction of AI TIMER 1).
Note 3: The three steps of increase volume can be selected.
Note 4: Decrease correction volume is lowered in accordance with VR UP.
Note 5: Same as Note 3. However, the VR position is limited at the position of 12.

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CIRCUIT DESCRIPTION

Function description

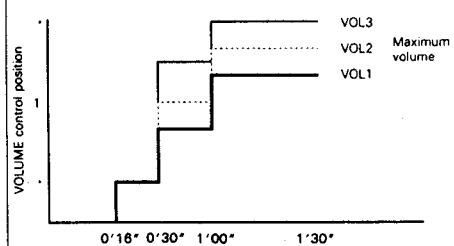
a) AI TIMER 1

- With the program timer mode set to PLAY, when the timer is turned ON, the setting contents for the AI TIMER 1 is activated if the AI TIMER 1 is set to ON (the FL indicator is lit).
- When the AI TIMER 1 is turned ON, first playback starts with the minimum volume level, then the volume level is increased in three steps.
- The third-step volume level (the maximum volume level) can be selected among the three types of the volume levels (VOL. 1-3). Each time the AI TIMER 1 key is pressed, the maximum volume level is changed in order from VOL. 1 to VOL. 3 and TIMER OFF setting cyclically.

① When the key is pressed with the AI TIMER 1 is OFF (FL indicator is not lit):
OFF → VOL. 1 → VOL. 2 → VOL. 3

② When the key is pressed in the volume setting mode (FL indicator is lit):
Example: When VOL. 2 is selected
VOL. 2 → VOL. 3 → OFF → VOL. 1

Reference for volume selection



- The VOLUME control rotates as the volume changes.
- The graphic equalizer curve also varies accordingly.

b) AI TIMER 2

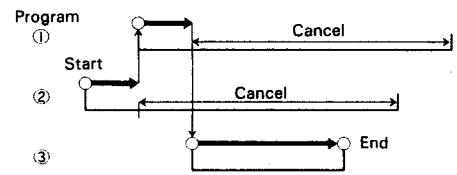
- With the program timer mode set to PLAY, when the timer is turned ON, the setting contents for the AI TIMER 2 is activated if the AI TIMER 2 is set to ON (FL indicator is lit).
- When the AI TIMER 2 is turned ON, if the disc is loaded in the CD player, the two tracks on the disc is played regardless whether the other source is set for play.
  Then, the playback source is changed to tuner automatically.
- Each time the AI TIMER 2 key is pressed, the timer setting is changed alternately.

Timer program operation

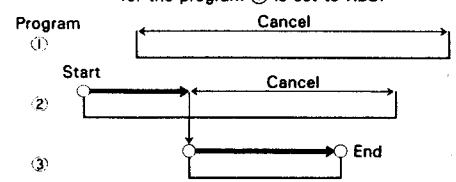
<When the program settings are registered within the same period>

- *When the two or more program settings are to be started* at the same time:
  The program having the least number is activated and others will be cancelled.
- When the setting time for two or more programs differ:
  First, the program with the earliest setting time is activated. Then, if the same mode (REC mode or PLAY mode) has been designated for the other program, the operation is changed to the program in which the same mode as the first one is designated and the end time for the above program will be cancelled. If another mode is set for of other programs, the contents will be cancelled.

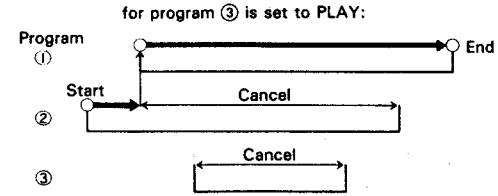
Example 1: When the operation modes for all three programs are set to PLAY:



Example 2: When the operation modes for programs ②, ③ are set to PLAY and that for the program ① is set to REC:



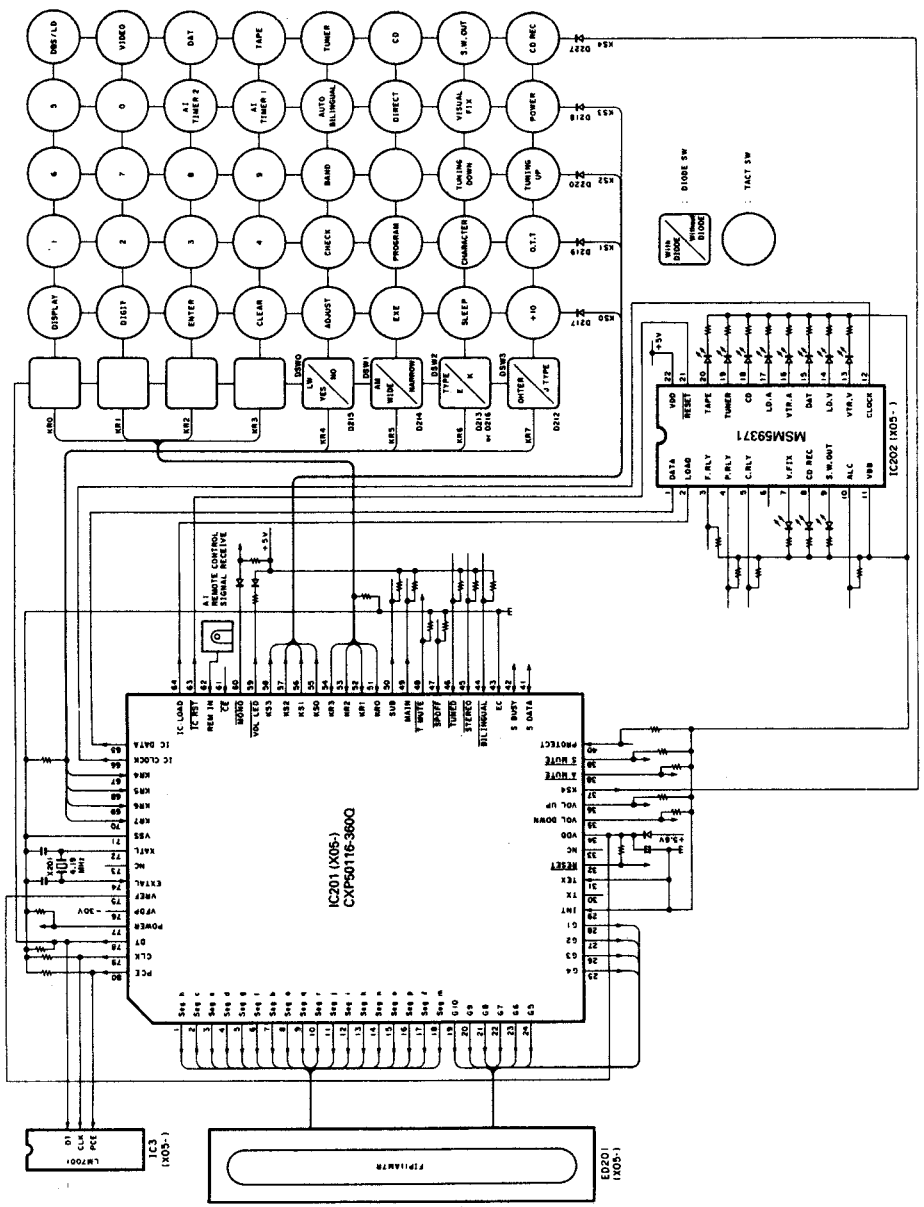
Example 3: When the operation mode for programs ①, ② are set to REC and that for program ③ is set to PLAY:



The program end is determined by the OFF time of the program which is activated at the last.

CIRCUIT DESCRIPTION

Block diagram of surrounding microprocessor



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CIRCUIT DESCRIPTION

Function initial setting

(1) Tuner section

POWER	OFF
BAND	FM
Last frequency	Lower most limit of each band
Last preset	"- -" display
Preset memory	Test frequency of each memory
AUTO/MONO	AUTO
BILINGUAL	BOTH MODE
Display mode	POWER ON ... Frequency display
	POWER OFF ... Clock display

(2) Clock, calendar, and timer section

Calendar	January 1, 1991	
Clock	0:00	Power failure mode
Programmable timer	Day of week	: TUE
	ON	: 0:00
	OFF	: 0:00
	MODE	: PLAY
	SOURCE	: TUNER
	SET ch	: 01 ch
	Execution mode	: OFF
Sleep timer	OFF	
One touch timer	OFF	

(3) Amplifier section

Selector	Audio system	: TUNER
	Video system	: LD
V-FIX	OFF	
CDREC	OFF	
SUPER WOOFER	OFF	

Setting of initial conditions (reset)

(1) Method

While pressing ENTER key, turn the AC ON.

(2) Contents

Clears all the memory and returns to the initial conditions. However, the test frequency is newly memorized in the preset memory at this time. (The same as when the back-up data is NG.)

Test mode

(1) Setting method

While pressing CHARACTER key, turn the AC on.

(2) Clearing method

AC off.

(3) Contents

- All fluorescent lamps and LEDs light.
- Speaker relay ON/OFF. (The front and surround speakers output sounds)
- Receive the minimum FM value.

The test is performed with the following keys.

1) Preset channel calling

Normally, the +10 key changes the high-order digits 1-, 2-, and 0- alternately, but it changes the high-order digits 1- and 0- alternately in the test mode. The 0 key does not call any channel, but in the test mode, if the high-order digit is 0, 10 ch is called, and if it is 1, 20 ch is called. Table 1 lists the channels to be called.

Table 1

High order \ Low order	TEN KEY									
	1	2	3	4	5	6	7	8	9	0
0	1	2	3	4	5	6	7	8	9	10
1	11	12	13	14	15	16	17	18	19	20

2) Motor volume test

If the DIGIT key is pressed, the volume keeps increasing for 16 seconds, and then keeps decreasing for 16 seconds. To stop the test in the middle, switch the power off.

3) O.T.T key test (one-touch-timer)

Normally, the O.T.T key is not accepted if the clock is not functioning. Only in the test mode, it is indicated that the key is accepted, but it does not cause any operation. When the key is pressed the first time, ON 0:30 O.T.T appears on the fluorescent display, and after five seconds, only O.T.T is displayed. When the key is pressed the second time, O.T.T disappears, and the original state before the key is pressed returns.

Conditions by destination

Destination type		Destination switches (DSW) B3	B2	B1	B0	Band	Receiving frequency range	Inter-channel space	Intermediate frequency	PLL reference frequency
A-522	M, Y	1	1 or 0	0	0	FM	87.5 ~ 108.0 MHz	50 kHz /100 kHz	+10.7 MHz	50 kHz (25 kHz)
						AM	531 ~ 1602 kHz /530 ~ 1610 kHz	9 kHz /10 kHz	+450 kHz	10 kHz
	K, P	1	0	0	0	FM	87.5 ~ 108.0 MHz	100 kHz	+10.7 MHz	50 kHz (25 kHz)
						AM	530 ~ 1610 kHz	10 kHz	+450 kHz	10 kHz
	X	1	1	0	0	FM	87.5 ~ 108.0 MHz	50 kHz	+10.7 MHz	50 kHz (25 kHz)
						AM	531 ~ 1602 kHz	9 kHz	+450 kHz	9 kHz
A-522L	T, E, L	1	1	0	1	FM	87.5 ~ 108.0 MHz	50 kHz	+10.7 MHz	50 kHz (25 kHz)
						MW	531 ~ 1602 kHz	9 kHz	+450 kHz	9 kHz
						LM	153 ~ 281 kHz	1 kHz	+450 kHz	1 kHz

CIRCUIT DESCRIPTION

Microprocessor: CXP50116-360Q (X05: IC201)

Pin functions

Pin No.	Pin name	I/O	Name	Description
1 ~ 18	S4 ~ S21/PG0 ~ PG3 PK0 ~ PK3, PJ0 ~ PJ3 T15 ~ T10	O	Segment	Segment (h, c, e, d, g, f, b, a, q, r, j, i, k, n, o, p, l, m)
19 ~ 28	S22, S23/T9, T8, T7 ~ T0	O	G10 ~ G1	Grid 10 ~ 1
29 ~ 31	INT, TX, TEX		INT, TX, TEX	No used.
32	RST	I	$\overline{\text{RESET}}$	Reset pin — Low: RESET, High: NORMAL
33	NC		NC	No used.
34	Vdd		Vdd	+5 V power supply
35	PI0	O	VOLD	Motor volume down — Low: STOP, High: ACTIVE
36	PI1	O	VOLU	Motor volume up — Low: STOP, High: ACTIVE
37	PI2	O	KS4	Key scan signal output (KS4)
38	PI3	O	$\overline{\text{AMUTE}}$	Amplifier mute — Low: ON, High: OFF
39	PB0	O	$\overline{\text{SMUTE}}$	Super woofer mute — Low: ON, High: OFF
40	PB1	I	PROTECT	Protection detection — Low: OFF, High: ON
41	PB2	I/O	SDATA	Serial communication DATA
42	PB3	I/O	SBUSY	Serial communication BUSY
43	EC		EC	No used.
44	PX0	I	$\overline{\text{BILINGUAL}}$	TV bilingual signal detection — Low: BILINGUAL, High: NORMAL
45	PX1	I	$\overline{\text{STEREO}}$	Stereo signal detection — Low: STEREO, High: MONAURAL
46	PX2	I	$\overline{\text{TUNED}}$	SD signal detection — Low: TUNED, High: OFF
47	PA0	I	$\overline{\text{SPOFF}}$	Head phone use detection — Low: Use, High: No use
48	PA1	O	TMUTE	Tuner mute — Low: OFF, High: ON
49	PA2	O	MAIN	TV main selection signal output
50	PA3	O	SUB	TV sub selection signal output
51 ~ 54	PF0 ~ PF3	I	KR0 ~ KR3	Key return signal input (KR0 ~ KR3)
55 ~ 58	PE0 ~ PE3	O	KS0 ~ KS3	Key scan signal output (KS0 ~ KS3)
59	PY0	O	$\overline{\text{VOLLED}}$	Volume LED drive — Low: ON, High: OFF
60	PY1	O	$\overline{\text{MONO}}$	Forced monaural output — Low: ON, High: OFF
61	PY2	I	CE	Chip enable signal input — Low: OFF, High: ON
62	PY3	I	REMIN	Remote control signal input
63	PD0	O	$\overline{\text{ICRST}}$	Expansion port IC (MSM59371RS) RESET
64	PD1	O	ICLOAD	Expansion port IC (MSM59371RS) STROBE
65	PD2	O	ICDATA	Expansion port IC (MSM59371RS) DATA
66	PD3	O	ICCLOCK	Expansion port IC (MSM59371RS) CLOCK
67 ~ 70	PC0 ~ PC3	I	KR4 ~ KR7	Key return signal input (KR4 ~ KR7)
71	Vss		Vss	GND
72	XTAL		XTAL	Crystal oscillator input (4.19 MHz)
73	NC		NC	No used.
74	EXTAL		EXTAL	Crystal oscillator input (4.19 MHz)
75	Vref		Vref	No used.
76	Vfdp		Vfdp	-30 V power supply.
77	S0/PH0	O	POWER	Power ON/OFF signal output — Low: OFF, High: ON
78	S1/PH1	O	DT	PLL IC (LM7001) DATA
79	S2/PH2	O	CLK	PLL IC (LM7001) CLOCK
80	S3/PH3	O	PCE	PLL IC (LM7001) STROBE

A-522/522L

CIRCUIT DESCRIPTION

Test frequency

TYPE / CH	A-522 Y.M	A-522 K.P	A-522 Y.M.X	A-522L T.E.L
1	FM 98.0MHz	FM 98.0MHz	FM 98.0MHz	FM 98.0MHz
2	FM 108.0MHz	FM 108.0MHz	FM 108.0MHz	FM 108.0MHz
3	AM 630KHz	AM 630KHz	AM 630KHz	AM 630KHz
4	AM 990KHz	AM 990KHz	AM 990KHz	AM 990KHz
5	AM 1440KHz	AM 1440KHz	AM 1440KHz	AM 1440KHz
6	AM 1610KHz	AM 1610KHz	AM 1602KHz	AM 1602KHz
7	FM 87.5MHz	AM 1700KHz	FM 87.5MHz	LW 162KHz
8	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz	LW 216KHz
9	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz	LW 270KHz
10	FM 89.1MHz	FM 89.1MHz	FM 89.1MHz	FM 89.1MHz
11	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz	LW 280KHz
12	FM 90.0MHz	FM 90.0MHz	FM 90.0MHz	FM 90.0MHz
13	FM 106.0MHz	FM 106.0MHz	FM 106.0MHz	FM 106.0MHz
14	AM 530KHz	AM 530KHz	AM 531KHz	AM 531KHz
15	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz	LW 153KHz
16~20	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz	FM 87.5MHz

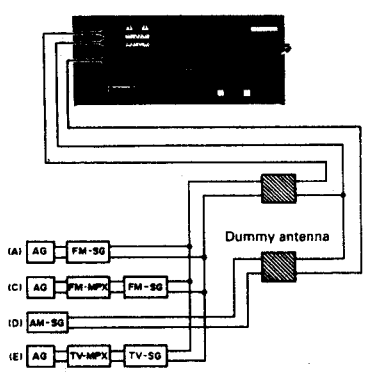
Expansion port IC: MSM59371 (X05: IC202)

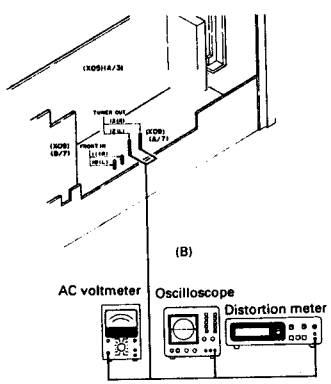
Pin functions

Pin No.	Pin name	I/O	Name	Description
1	DATA	I	ICDATA	DATA input
2	LOAD	I	ICLOAD	Strobe input
3	016	O	F. RLY	Front speaker relay — Low: OFF, High: ON
4	015	O	P. RLY	Presence speaker relay — Low: OFF, High: ON
5	014	O	C.RLY	Center and surround speaker relay — Low: OFF, High: ON
6	013	O		No used.
7	012	O	VFIX	V-FIX LED drive — Low: OFF, High: ON
8	011	O	CDREC	CD REC LED drive — Low: OFF, High: ON
9	010	O	S.W.OUT	SUPER WOOFER LED drive — Low: OFF, High: ON
10	09	O	ALC	ALC signal output — Low: OFF, High: ON
11	Vbb		Vbb	GND
12	CLOCK	I	ICCLOCK	Clock input
13	08	O	VTR.V	Selector VIDEO (V) LED drive — Low: OFF, High: ON
14	07	O	LD.V	Selector LD (V) LED drive — Low: OFF, High: ON
15	06	O	DAT	Selector DAT LED drive — Low: OFF, High: ON
16	05	O	VTR.A	Selector VIDEO (A) LED drive — Low: OFF, High: ON
17	04	O	LD.A	Selector LD (A) LED drive — Low: OFF, High: ON
18	03	O	CD	Selector CD LED drive — Low: OFF, High: ON
19	02	O	TUNER	Selector TUNER LED drive — Low: OFF, High: ON
20	01	O	TAPE	Selector TAPE LED drive — Low: OFF, High: ON
21	RESET	I	$\overline{\text{ICRST}}$	Reset signal input
22	Vdd		Vdd	+5 V power supply

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION			SELECTOR: FM				
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ±75kHz dev (K,P,M,Y,X type) 1kHz, ±40kHz dev (E,T,L,M,Y type) 60dBμ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L2 (X05-)	0V	(a)
2	VCO	(A) 98.0MHz 0 dev 60dBμ (ANT input)	Connect a frequency counter to TP5 and TP6 (GND). (X05-)	AUTO 98.0MHz	VR2 (X05-)	19.00kHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±68.25kHz dev Pilot: ±7.5kHz dev (K,P,M,Y,X type) 1kHz, ±40kHz dev Pilot: ±6kHz dev (E,T,L,M,Y type) 60dBμ (ANT input)	(B)	MONO 98.0MHz	IFT (X02-)	Minimum distortion	
4	SEPARATION (E,T,L type only)	(C) 98.0MHz 1kHz, ±40kHz dev Pilot ±6kHz dev Selector: L or R 60dBμ (ANT input)	(B)	AUTO 98.0MHz	VR4 (X05-)	Minimum crosstalk	
5	TUNING LEVEL	(A) 98.0MHz 1kHz, ±75kHz dev (K,P,M,Y,X type) 1kHz, ±45kHz dev (E,T,L,M,Y type) 14dBμ(ANT input) 75Ω 18dBμ(ANT input)300Ω	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where ED201(TUNED) goes on.	
AM (MW) SELECTION			SELECTOR: AM(MW)				
(1)	TUNING LEVEL	(D) 1008kHz 400Hz, 30% mod 26dBμ(ANT input)	(B)	1008kHz	VR3 (X05-)	Adjust VR3 and stop at the point where ED201 (TUNED) goes on.	

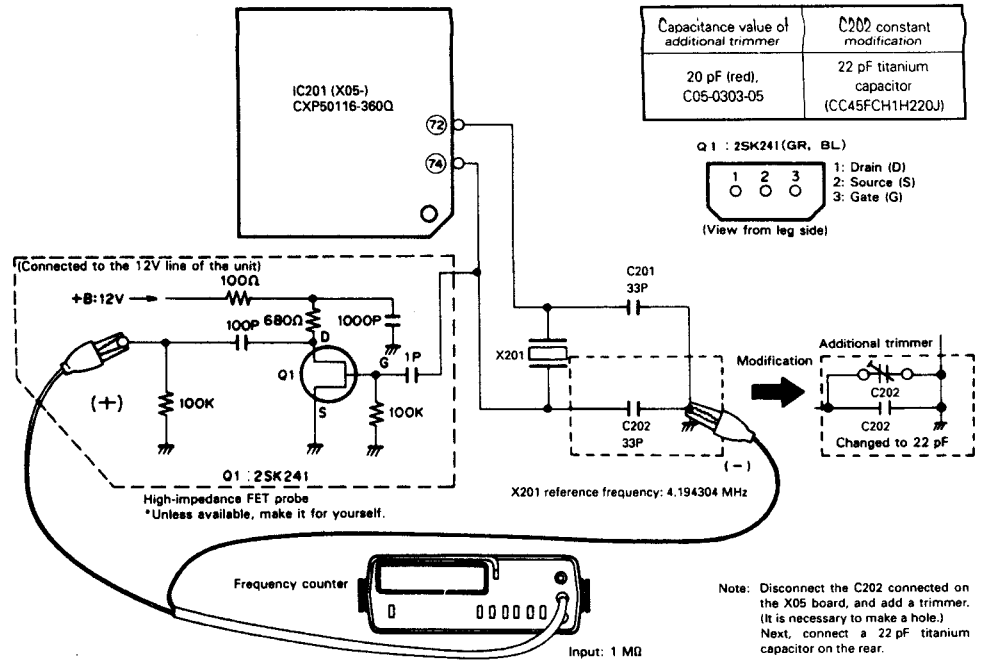




A-522/522L

ADJUSTMENT

Timer accuracy improvement method



Capacitance value of additional trimmer	C202 constant modification
20 pF (red), C05-0303-05	22 pF titanium capacitor (CC45FCH1H220J)

Note: Disconnect the C202 connected on the X05 board, and add a trimmer. (It is necessary to make a hole.) Next, connect a 22 pF titanium capacitor on the rear.

The timer accuracy is within ±40 seconds for one month as a standard. For improved timer accuracy, perform the following procedure:

(1) If the timer accuracy is without the standard, replace X201 (L77-1176-05) near the microprocessor IC on a printed board (X05-).

(2) Even if within the standard, for further improved accuracy, change the constant of C202 in the crystal oscillation circuit of microprocessor IC201 and add a trimmer.

Adjustment method (Use a high-impedance buffer to avoid frequency deviation.)
Connect a high-accuracy frequency counter to pin 74 by way of the FET probe shown above, and adjust the frequency fully up to the first digit of the X201 reference frequency 4,194,304 Hz. (Connect the negative (−) side of the frequency counter to the GND side of C202.)

Note (a) As regards the positive (+) side of the frequency counter, arrange as short a distance as possible between pin 74 of IC201 and 1P of the input stage of the FET probe.

Note (b) Perform the trimmer adjustment after energization of around 10 minutes at normal temperature.

(3) Monthly error calculation method
For example, when the result of measurement at pin 74 by the frequency counter is fx = 4,194,275 Hz...
(Reference frequency fo = 4,194,304 [Hz])

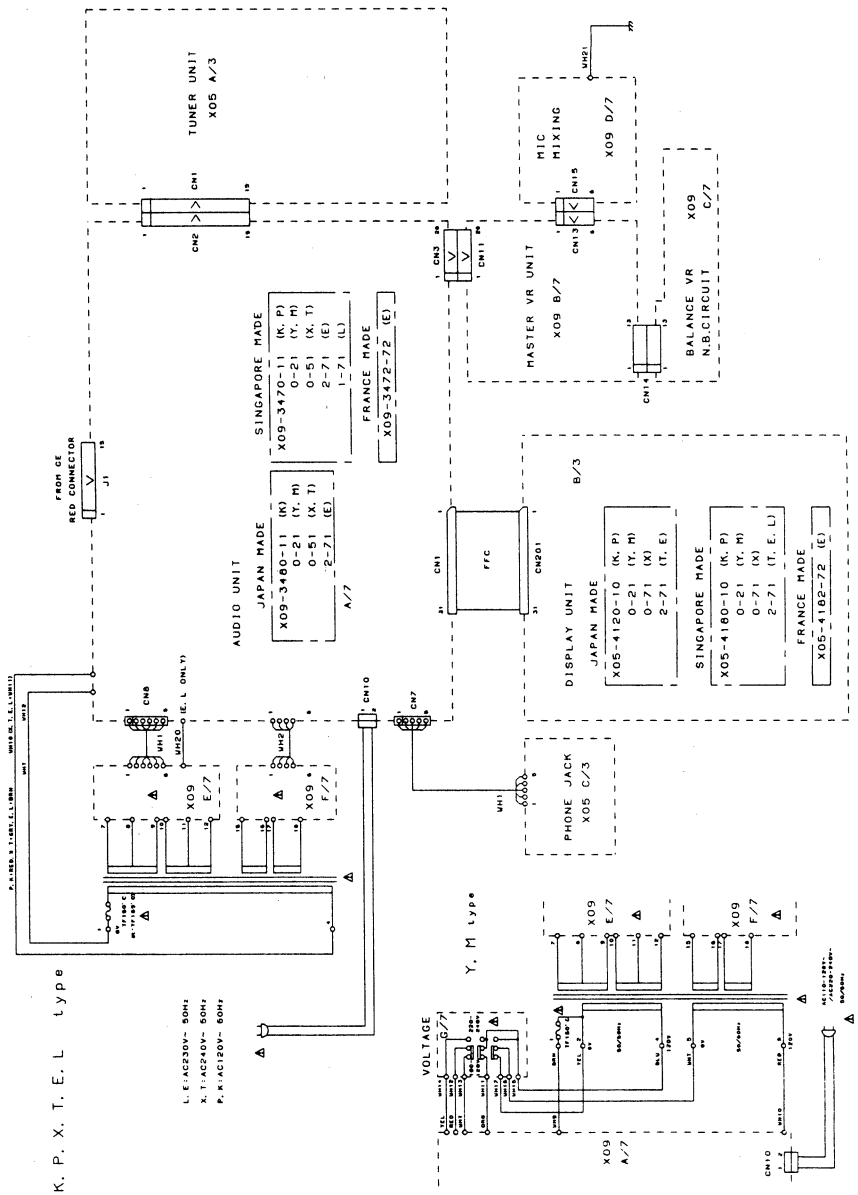
$$\text{Monthly error [sec]} = \frac{fx - fo}{fo} \times \text{the number of seconds taken for one month}$$

$$= \frac{4,194,275 - 4,194,304}{4,194,304} \times (60 \times 60 \times 24 \times 30)$$

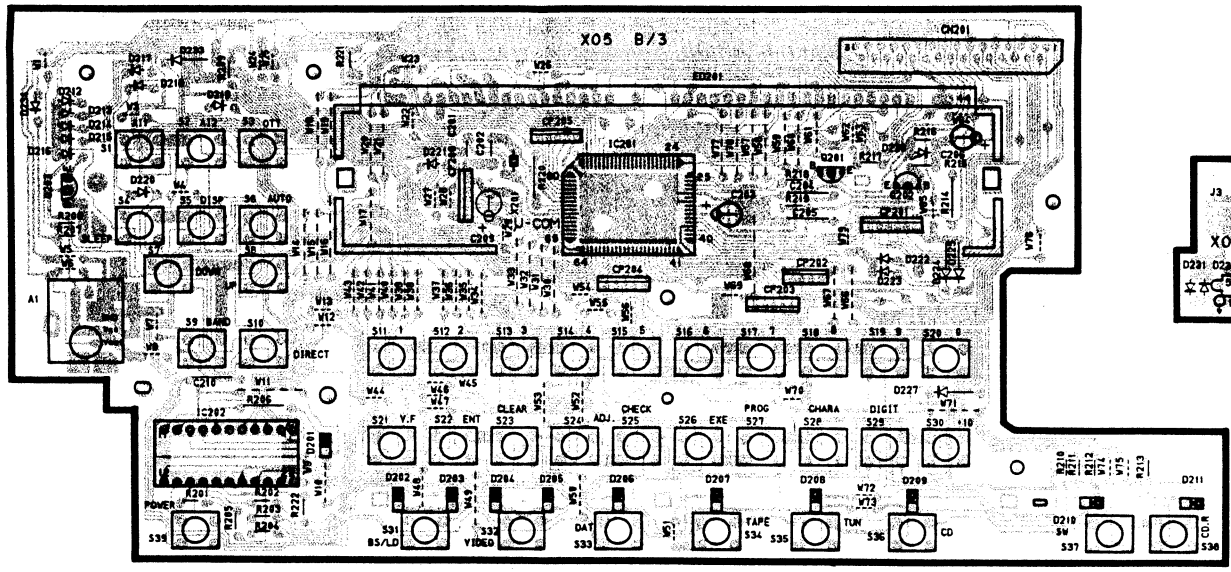
$$= -17.9 \text{ [sec]}$$

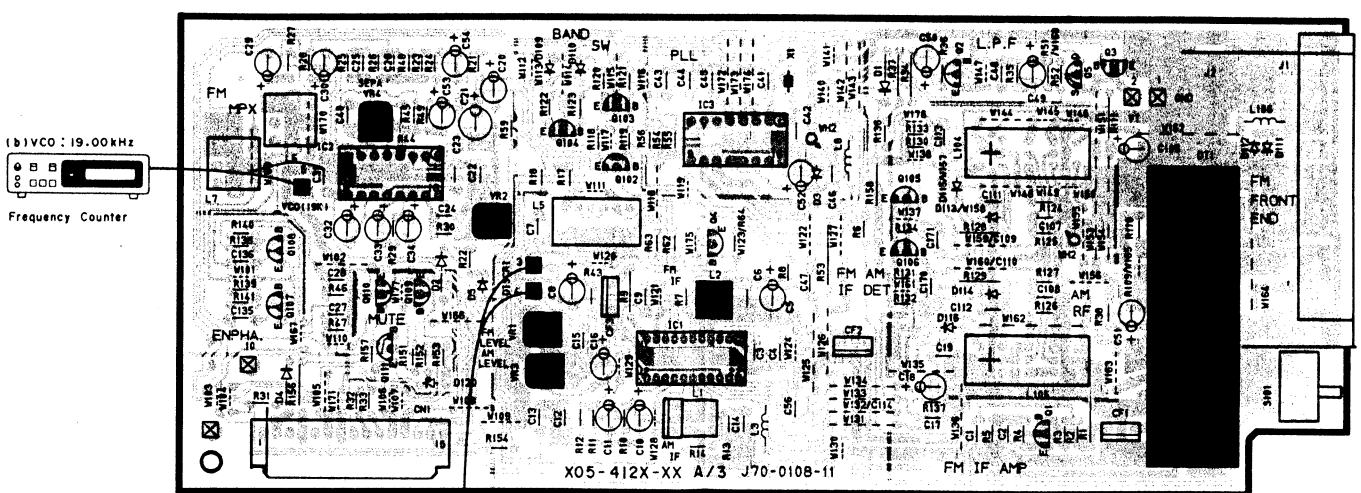
* A minus value as the monthly error means a loss.

WIRING DIAGRAM



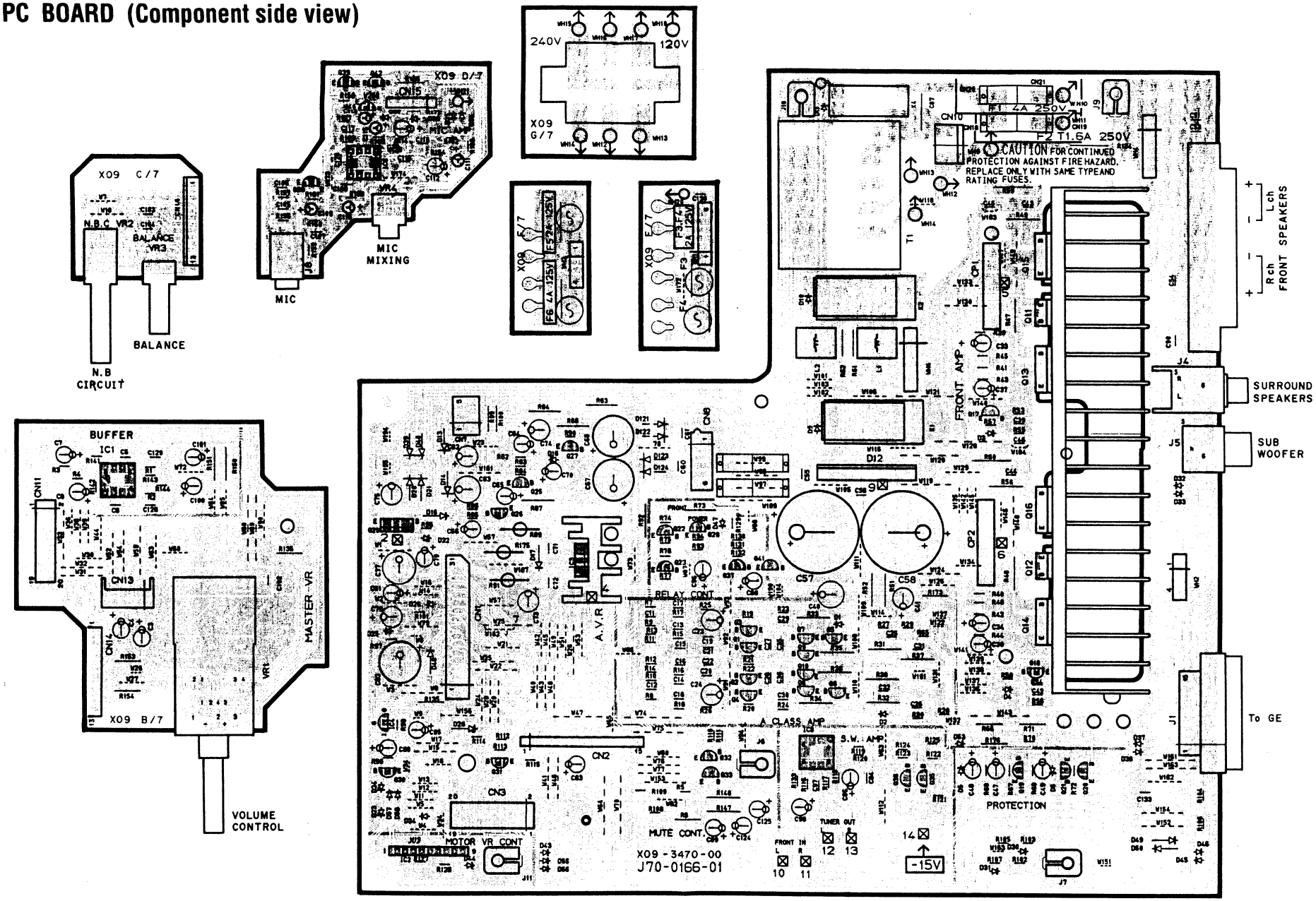
PC BOARD (Component side view)



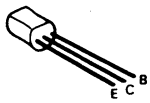


Refer to the schematic diagram for the values of registers and capacitors.

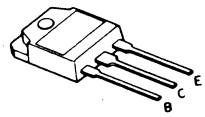
PC BOARD (Component side view)



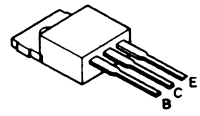
Refer to the schematic diagram for the values of registers and capacitors.



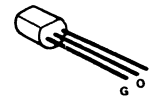
2SA1123
2SA954
2SA992
2SB764
2SC1845
2SC1923
2SC2878
2SD1302



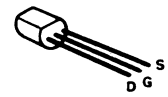
2SB1531
2SD2340



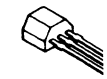
2SD1266



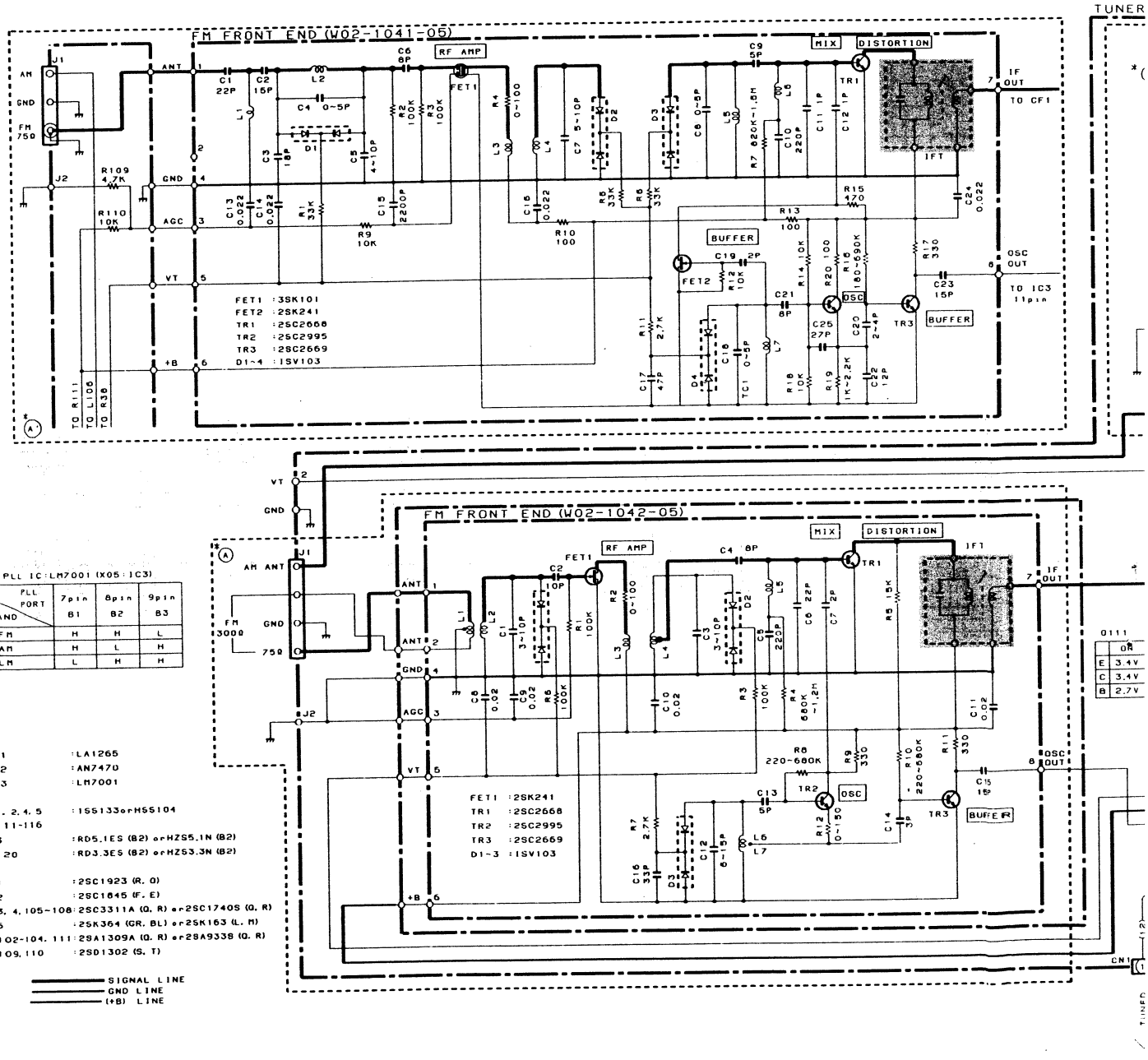
PST529C



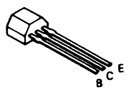
2SK163
2SK364



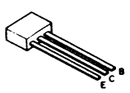
DTC124
2SA933
2SC174



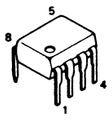
CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



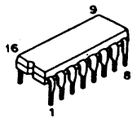
DTC124ES
2SA933S
2SC1740S



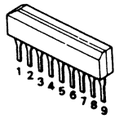
UN4212
2SA1309A
2SC3311A



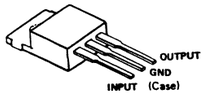
NJM4565D-D



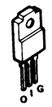
AN7470



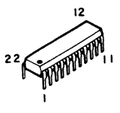
TA8409S



TA7815HF
UPC7815HF

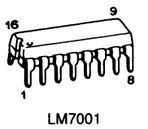


BA17815T

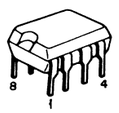


LA1265

2SC4137

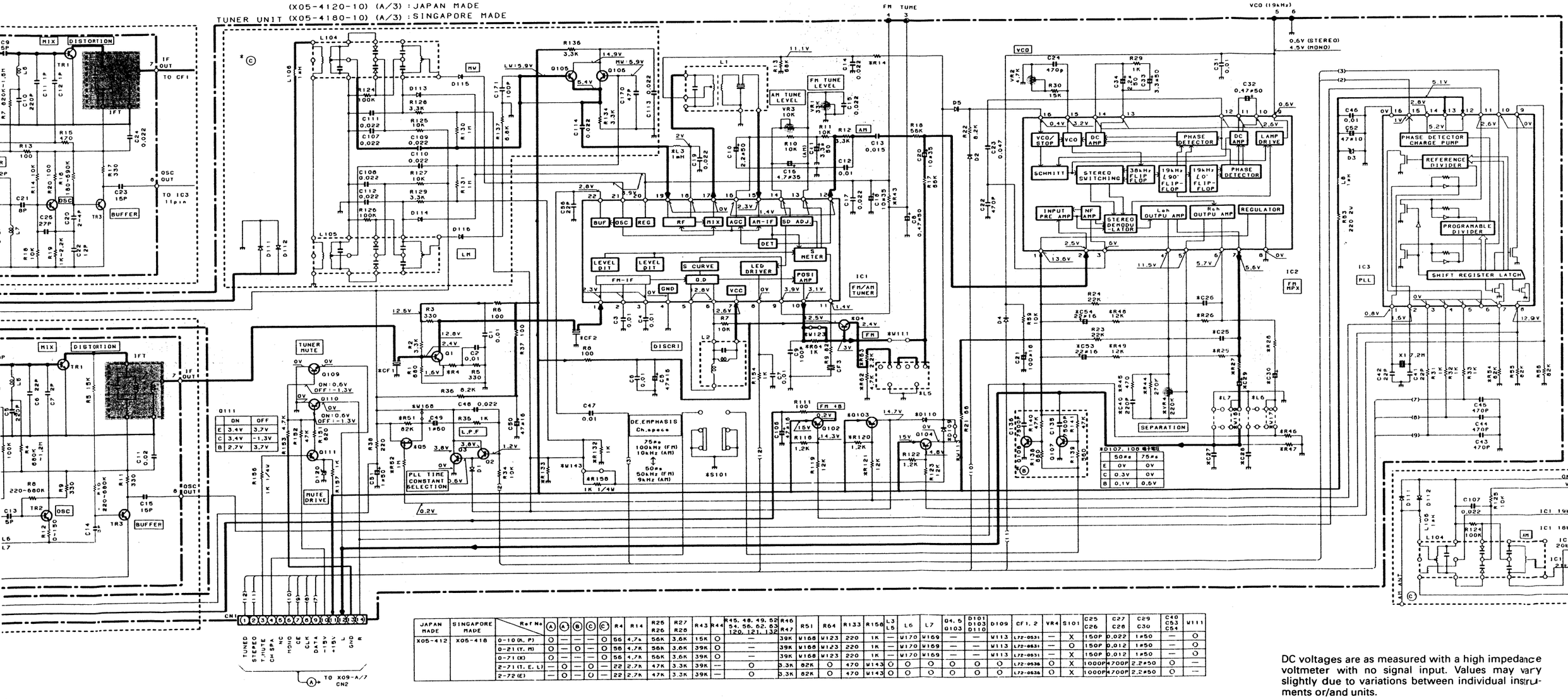


LM7001



RC4565D-D

(X05-4120-10) (A/3) : JAPAN MADE
TUNER UNIT (X05-4180-10) (A/3) : SINGAPORE MADE



JAPAN MADE	SINGAPORE MADE	Ref No	Ⓐ	Ⓐ'	Ⓑ	Ⓒ	Ⓒ'	R4	R14	R25 R26	R27 R28	R43	R44	R45, 48, 49, 52 54, 56, 62, 63 120, 121, 132	R46 R47	R51	R64	R133	R156	L3 L5	L6	L7	Q4, 5 Q103	D101 D103 D110	D109	CF1, 2	VR4	S101	C25 C26	C27 C28	C29 C30	C40 C53 C54	W111
X05-412	X05-418	0-10 (R, P)	O	—	—	—	O	56	4.7k	56K	3.6K	15K	O	—	39K	W168	W123	220	1K	—	W170	W169	—	—	W113	L72-0531	—	X	150P	0.022	1≠50	—	O
		0-21 (Y, M)	O	—	—	—	O	56	4.7K	56K	3.6K	39K	O	—	39K	W168	W123	220	1K	—	W170	W169	—	—	W113	L72-0531	—	X	150P	0.012	1≠50	—	O
		0-71 (K)	O	—	—	—	O	56	4.7K	56K	3.6K	39K	O	—	39K	W168	W123	220	1K	—	W170	W169	—	—	W113	L72-0531	—	X	150P	0.012	1≠50	—	O
		2-71 (T, E, L)	—	O	—	O	—	22	2.7K	47K	3.3K	39K	—	O	3.3K	82K	O	470	W143	O	O	O	O	O	O	L72-0536	O	X	1000P	4700P	2.2≠50	O	—
		2-72 (E)	—	O	—	O	—	22	2.7K	47K	3.3K	39K	—	O	3.3K	82K	O	470	W143	O	O	O	O	O	O	L72-0536	O	X	1000P	4700P	2.2≠50	O	—

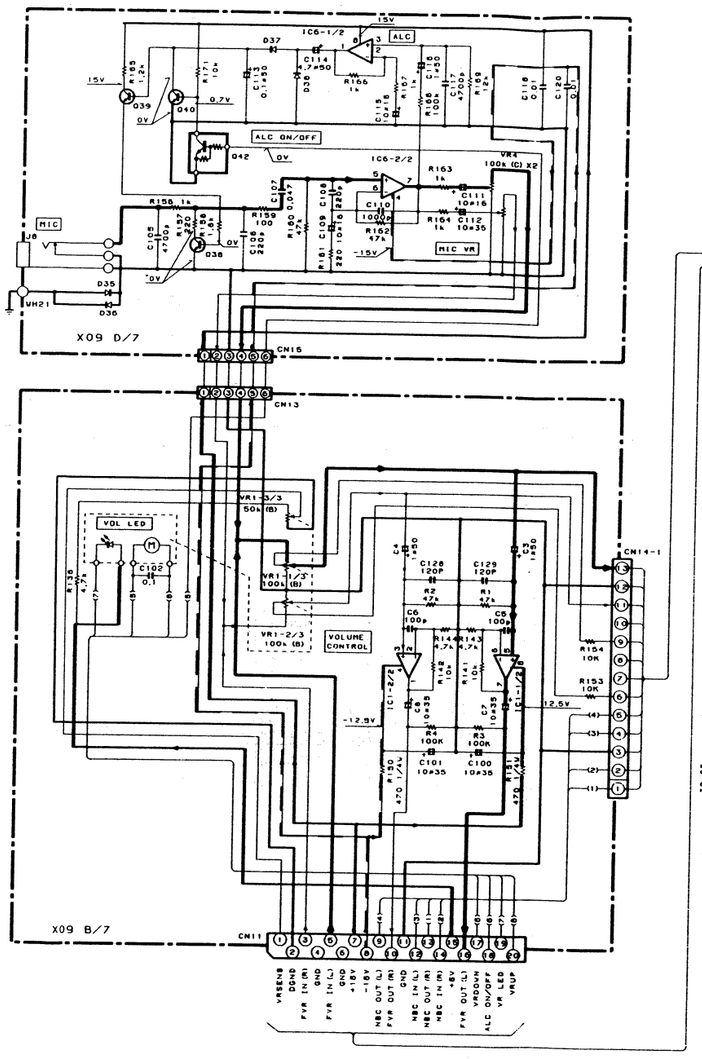
Q111	ON	OFF
E	3.4V	3.7V
C	3.4V	-1.3V
B	2.7V	3.7V

D107, 108	50㎲	75㎲
E	0V	0V
C	0.3V	0V
B	0.1V	0.6V

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Y05-2570-11

A-522/52
KENWOO



01-4, 6, 9, 10 17-19 :HSS104A or 1SS131
013, 14, 20, 21 39, 40, 121-124 :SS6088 or 1SR139-100
025, 27, 30-36 41-50, 55-58 :HSS104 or 1SS133
05 :HZS5.1N (B2) or RD5.1ES (B2)
012 :RBV-602LFA or DSSBA20F03
016, 24 :HZS16N (B2) or RD16ES (B2)
022 :HZS6.2N (B2) or RD6.2ES (B2)
023 :HZS11N (B2) or RD11ES (B2)
026 :HZS6.8N (B2) or RD6.8ES (B2)
028, 53 :HZS4.7N (B) or RD4.7ES (B)

01-6 :2SA992 (F, E)
07-10, 17, 18, 20, 21 :2SC1048 (F, E)
011, 12 :2SC4137 (Y, U)
013, 14 :2SD2340
015, 16 :2SB1531
019 :2SA1123 (R, S)
022, 23, 26, 28, 37-40 :2SC1740S (Q, R) or 2SC3311A (Q, R)

025 :2SC2003 (L, K)
027 :2SA964 (L, K)
029 :2SD1266 (Q, P)
030 :2SB764
031, 36 :2SA933S (Q, R) or 2SA1309A (Q, R)
032, 33, 35 :2SC2076 (B)
041-44 :DTC124ES or UN4212

IC1, 6, 8 :RC4558D or NJM4558D
IC2 :TA8409S
IC3 :TA7815HF or UPC7815HF or BA17815T
IC4 :PST529C

IC2 (TA8409S) (TRUTH TABLE)

INPUT		OUTPUT		MODE
① IN1	② IN2	⑤ OUT1	⑦ OUT2	PIN No. of IC2, 6 MODE of MOTOR
0	0	∞	∞	STOP
0	1	L	H	CW
1	0	H	L	CCW
1	1	L	L	BRAKE

∞ :HIGH IMPEDANCE
INPUT : "H" active

	Ⓐ	C53, 54 130	C43, 44	C45, 46	R59, 60	R134	X09 C/7	F6	F3-5	F1	F2	T1 R67-+++ 086	VH10	VH12	V25	V57 101 102	V118	VH11	VH20	TP14	Ⓑ	C25	C35	R80
0-11 (K, P)	—	—	0.047μ	M183, 184	10 2W	○	—	4A125V	2A125V	4A125V	—	0332	○	—	○	—	○	—	—	—		26	36	
0-21 (Y, M)	—	—	0.047μ	M183, 184	10 2W	—	○	T4A250V	T2A250V	T1.6A250V	T1.6A250V	0335	○	○	○	—	○	—	—	—		180P	82P	W199
0-91 (K, Y)	—	—	0.047μ	M183, 184	10 2W	—	—	T4A250V	T2A250V	—	T1.6A250V	0333	—	—	○	—	○	—	—	○		180P	82P	W199
1-71, 2-71, 2-72 (E)	—	○	0.22μ	0.22μ	4.7 2W	—	—	T4A250V	T2A250V	—	T1.6A250V	0334	—	—	○	—	○	○	○	—	○	100P	100P	W199

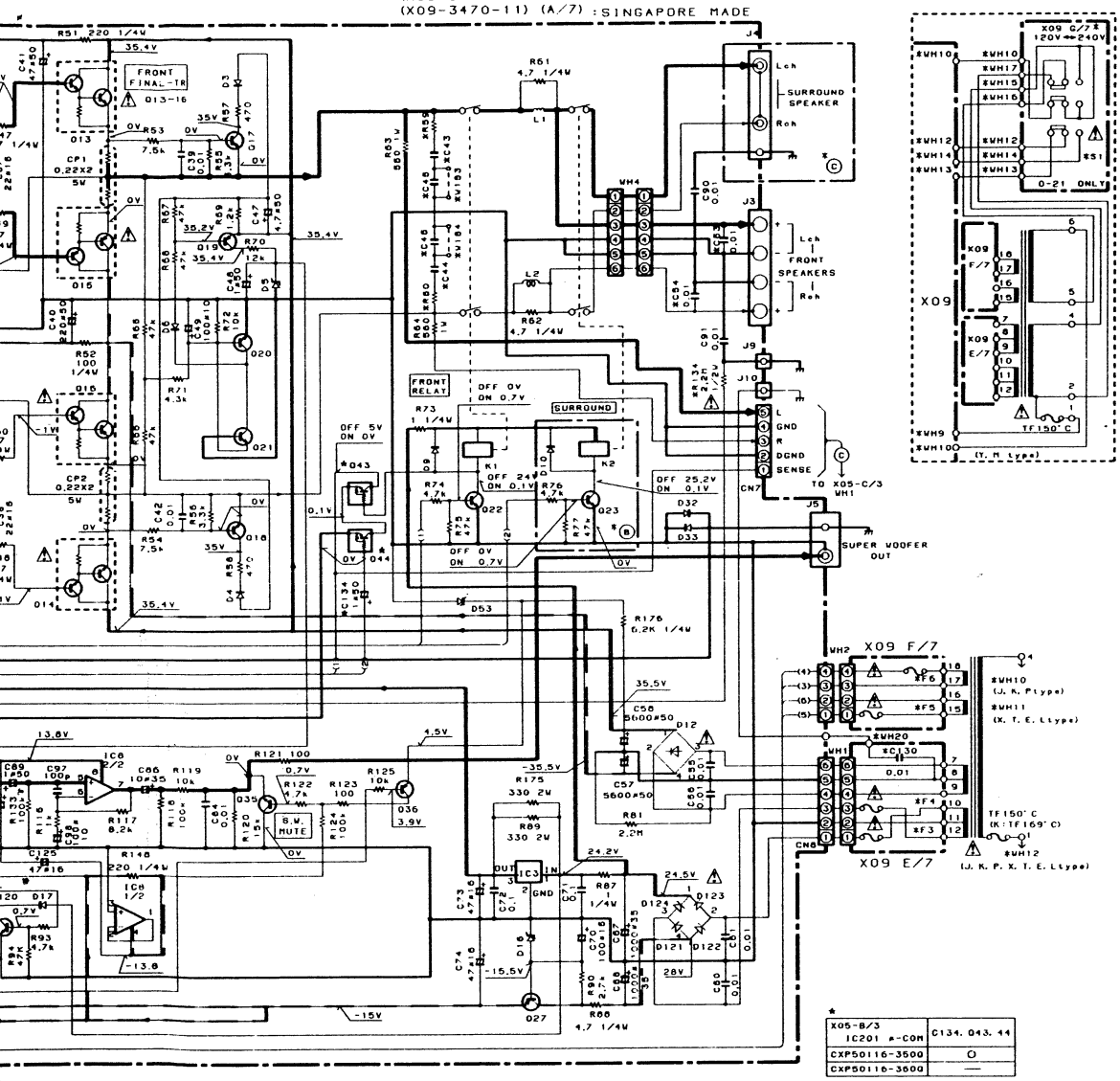
CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as m
voltmeter with no s
slightly due to variat
ments or/and units.

AUDIO UNIT

(X09-3480-11) (A/7) : JAPAN MADE

(X09-3470-11) (A/7) : SINGAPORE MADE



X05-B/3 IC201 μ-COM	C134, 043, 44
CXP501116-3500	O
CXP501116-3600	—

TI	WH10	WH12	W25	W57 181 182	W116	WH11	WH20	TP14	(B)	C25 26	C35 36	R80	©
0332	O	—	O	—	O	—	—	—	—	180P	82P	W199	—
0335	O	O	O	—	—	O	—	—	O	180P	82P	W199	O
0333	—	—	O	—	O	O	—	—	O	180P	82P	W199	O
0334	—	—	O	—	O	O	O	—	O	100P	100P	W199	O

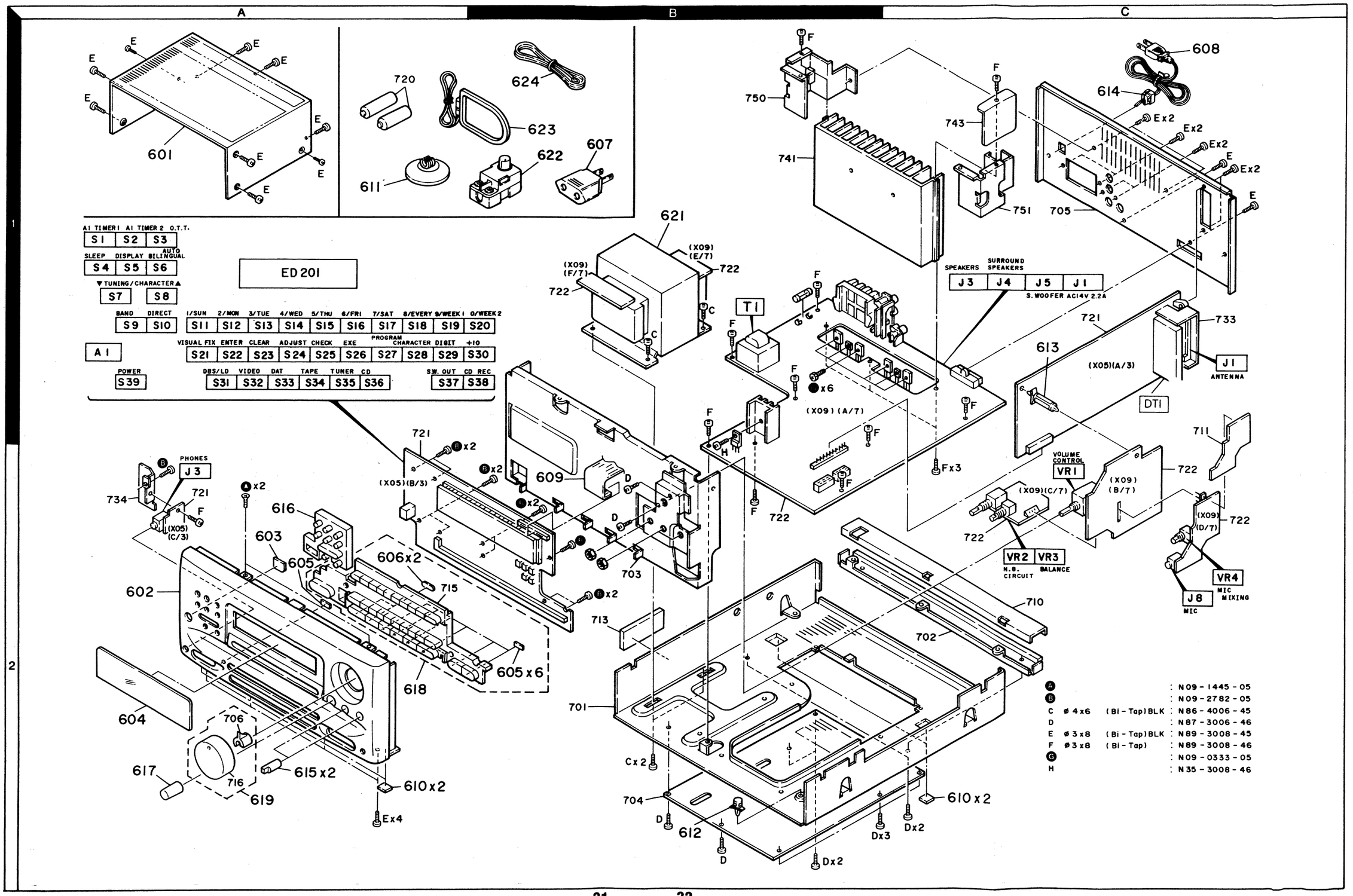
DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Y05-2570-11

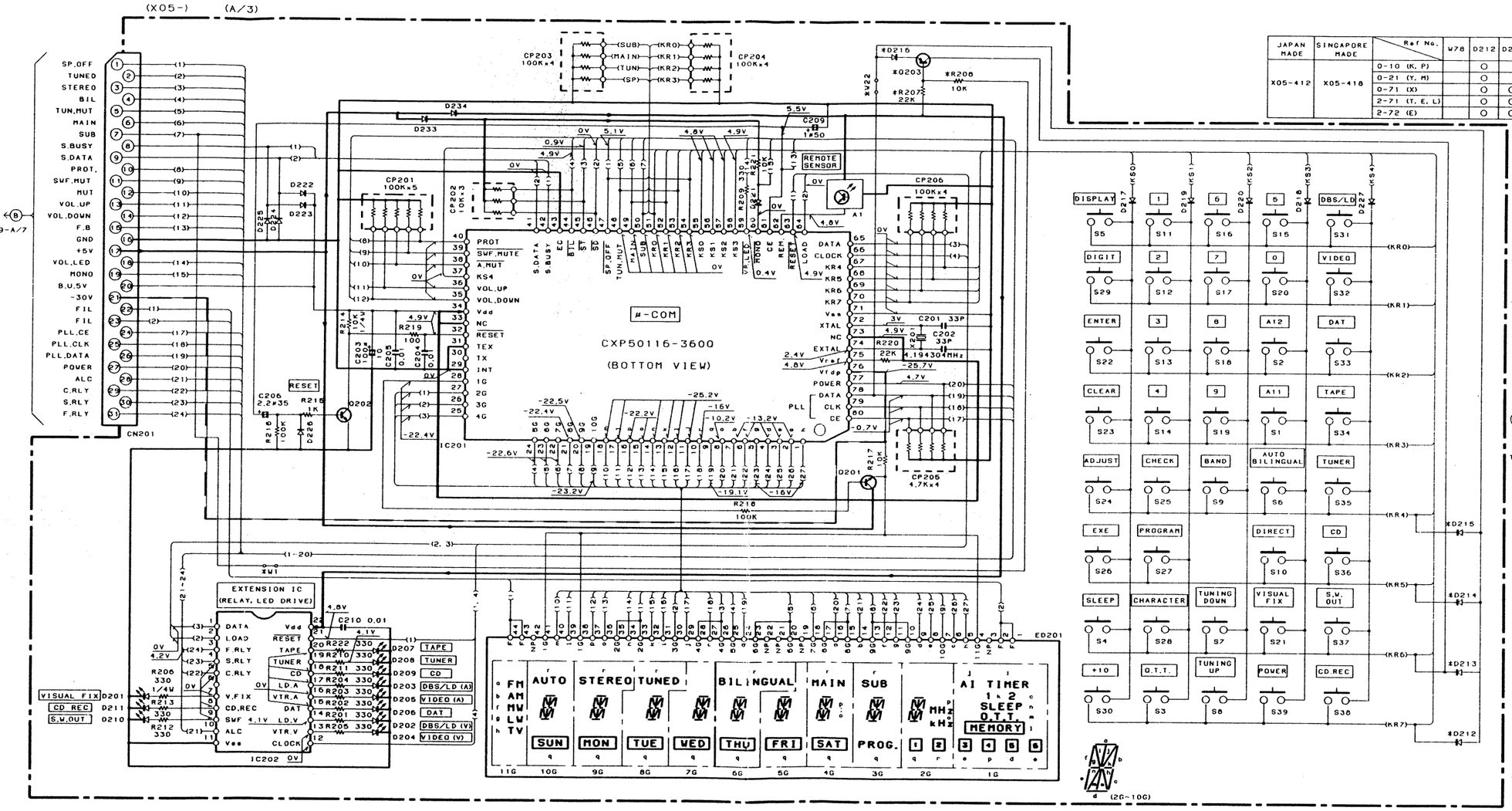
A-522/522

KENWOOD

EXPLODED VIEW



A			: N09 - 1445 - 05
B			: N09 - 2782 - 05
C	ø 4x6	(Bi - Tap)BLK	: N86 - 4006 - 45
D			: N87 - 3006 - 46
E	ø 3x8	(Bi - Tap)BLK	: N89 - 3008 - 45
F	ø 3x8	(Bi - Tap)	: N89 - 3008 - 46
G			: N09 - 0333 - 05
H			: N35 - 3008 - 46



JAPAN MADE	SINGAPORE MADE	Ref No.	W78	D212	D213	D214	D215	D203 D216	R207 R208	W1	W22
X05-412	X05-418	0-10 (K, P)		○							○
		0-21 (Y, M)		○		○		○	○	○	○
		0-71 (X)		○	○	○					○
		2-71 (T, E, L)		○	○	○	○				○
		2-72 (E)		○	○	○	○				○

D201, 202, 204 : 830-1010-05
D203, 205~211 : 830-1012-05
D212~227 231~234 : MSS104 or 1SS133
Q201, 202 : 2SC1740S (Q, R) or 2SC3311A (Q, R)
Q203 : 2SA933S (Q, R) or 2SA1309A (Q, R)
IC201 : CXP50116-3600
IC202 : MSM59371
ED201 : FIP11AM7R

CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Y05-2570-11

A-522/522L
KENWOOD

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No.1

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
A－522 (Japan made)						
601	1A		A01-1949-01	METALLIC CABINET		
602	2A	*	A60-0121-01	PANEL		
603	2A		B03-2728-04	DRESSING PLATE		
604	2A		B10-1855-03	FRONT GLASS		
605	2A,2B		B12-0160-04	INDICATOR		
606	2A		B12-0161-04	INDICATOR		
-		*	B46-0092-13	WARRANTY CARD	K	
-			B46-0094-03	WARRANTY CARD	Y	
-			B46-0095-03	WARRANTY CARD	Y	
-			B46-0096-23	WARRANTY CARD	X	
-			B46-0121-03	WARRANTY CARD	P	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B60-0671-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0672-00	INSTRUCTION MANUAL(FRENCH)	P	
-		*	B60-0676-00	INSTRUCTION MANUAL(SPANISH)	M	
-		*	B60-0677-00	INSTRUCTION MANUAL(CHINESE)	M	
⚠ 607	1B		E03-0115-05	AC PLUG ADAPTER	M	
⚠ 608	1C		E30-2592-15	AC POWER CORD	M	
⚠ 608	1C		E30-2594-15	AC POWER CORD	X	
⚠ 608	1C		E30-2605-05	AC POWER CORD	Y	
⚠ 608	1C		E30-2650-05	AC POWER CORD	KP	
609	2B		E31-4599-15	WIRING HARNESS		
610	2A,2C		G11-2052-14	CUSHION		
-			H10-5151-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-5152-02	POLYSTYRENE FOAMED FIXTURE		
-			H11-0042-04	POLYSTYRENE FOAMED BOARD	X	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-			H25-0397-04	PROTECTION BAG		
-		*	H50-0189-04	ITEM CARTON CASE	KPYM	
-		*	H50-0190-04	ITEM CARTON CASE	X	
611	1A		J19-2815-04	ANTENNA HOLDER		
612	2B		J19-3300-05	UNIT HOLDER		
613	1C		J19-3331-05	UNIT HOLDER		
⚠ 614	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
615	2A		K29-3960-04	KNOB(BALANCE,MIC MIXING)		
616	2A		K29-4173-02	KNOB(AI TIMER1,2 etc.)		
617	2A		K29-4175-04	KNOB(N.B.CIRCUIT)		
618	2A		K29-4176-12	KNOB ASSY(INPUT SELECTOR)		
619	2A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		
⚠ 621	1B	*	L07-0326-05	POWER TRANSFORMER	K	
⚠ 621	1B	*	L07-0327-05	POWER TRANSFORMER	P	
⚠ 621	1B	*	L07-0328-05	POWER TRANSFORMER	YM	
⚠ 621	1B	*	L07-0329-05	POWER TRANSFORMER	X	
-			N29-0067-05	PUSH RIVET (3.5X4.5)		
A			N09-1445-05	SET SCREW (M3X8)		
B			N09-2782-05	TAPTITE SCREW (2.6X8)		
C			N86-4006-45	BINDING HEAD TAPTITE SCREW		
D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW		
E			N89-3008-45	BINDING HEAD TAPTITE SCREW		

K:USA P:Canada
T:England E:Europe
X:Australia M:Other Areas

⚠ indicates safety critical components.

No.2

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
623	1B		T90-0173-05	LOOP ANTENNA		
624	1B		T90-0176-05	T TYPE ANTENNA		
A－522 (Singapore made)						
601	1A		A01-1978-01	METALLIC CABINET		
602	2A	*	A60-0121-01	PANEL		
603	2A		B03-2728-04	DRESSING PLATE		
604	2A		B10-1855-03	FRONT GLASS		
605	2A,2B		B12-0160-04	INDICATOR		
606	2A		B12-0161-04	INDICATOR		
-		*	B46-0092-13	WARRANTY CARD	K	
-			B46-0094-03	WARRANTY CARD	Y	
-			B46-0095-03	WARRANTY CARD	Y	
-			B46-0096-23	WARRANTY CARD	X	
-			B46-0121-03	WARRANTY CARD	P	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B60-0671-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0672-00	INSTRUCTION MANUAL(FRENCH)	P	
-		*	B60-0676-00	INSTRUCTION MANUAL(SPANISH)	M	
-		*	B60-0677-00	INSTRUCTION MANUAL(CHINESE)	M	
⚠ 607	1B		E03-0115-05	AC PLUG ADAPTER	M	
⚠ 608	1C		E30-2592-15	AC POWER CORD	M	
⚠ 608	1C		E30-2594-15	AC POWER CORD	X	
⚠ 608	1C		E30-2605-05	AC POWER CORD	Y	
⚠ 608	1C		E30-2650-05	AC POWER CORD	KP	
⚠ 608						
609	2B		E31-4599-15	WIRING HARNESS		
610	2A,2C		G11-2052-14	CUSHION		
-			H10-5188-12	POLYSTYRENE FOAMED FIXTURE	KPYM	
-			H10-5189-02	POLYSTYRENE FOAMED FIXTURE	KPYM	
-		*	H10-5212-12	POLYSTYRENE FOAMED FIXTURE	X	
-			H10-5213-02	POLYSTYRENE FOAMED FIXTURE	X	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-			H25-0397-04	PROTECTION BAG		
-		*	H50-0193-04	ITEM CARTON CASE	KPYM	
-		*	H50-0194-04	ITEM CARTON CASE	X	
611	1A		J19-2815-04	ANTENNA HOLDER		
612	2B		J19-3300-05	UNIT HOLDER		
613	1C		J19-3331-05	UNIT HOLDER		
⚠ 614	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
615	2A		K29-3960-04	KNOB(BALANCE,MIC MIXING)		
616	2A		K29-4173-02	KNOB(AI TIMER1,2 etc.)		
617	2A		K29-4175-04	KNOB(N.B.CIRCUIT)		
618	2A		K29-4176-12	KNOB ASSY(INPUT SELECTOR)		
619	2A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		
⚠ 621	1B	*	L07-0326-05	POWER TRANSFORMER	K	
⚠ 621	1B	*	L07-0327-05	POWER TRANSFORMER	P	
⚠ 621	1B	*	L07-0328-05	POWER TRANSFORMER	YM	
⚠ 621	1B	*	L07-0329-05	POWER TRANSFORMER	X	
-			N29-0067-05	PUSH RIVET (3.5X4.5)		
A			N09-1445-05	SET SCREW (M3X8)		

K:USA P:Canada
T:England E:Europe
X:Australia M:Other Areas

⚠ indicates safety critical component

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No.3

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
B			N09-2782-05	TAPTITE SCREW (2.6X8)		
C			N86-4006-45	BINDING HEAD TAPTITE SCREW		
D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW		
E			N89-3008-45	BINDING HEAD TAPTITE SCREW		
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
623	1B		T90-0174-05	LOOP ANTENNA		
624	1B		T90-0175-05	T TYPE ANTENNA		
A－522L (Japan made)						
601	1A		A01-1949-01	METALLIC CABINET		
602	2A	*	A60-0122-01	PANEL		
603	2A		B03-2728-04	DRESSING PLATE		
604	2A		B10-1855-03	FRONT GLASS		
605	2A,2B		B12-0160-04	INDICATOR		
606	2A		B12-0161-04	INDICATOR		
-			B46-0122-13	WARRANTY CARD	E	
-			B46-0143-13	WARRANTY CARD	T	
-			B58-0923-14	CAUTION CARD		
-		*	B60-0671-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0672-00	INSTRUCTION MANUAL(FRENCH)	E	
-		*	B60-0673-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-0674-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-0675-00	INSTRUCTION MANUAL(ITALIAN)	E	
⚠ 608	1C		E30-2592-15	AC POWER CORD	E	
⚠ 608	1C		E30-2593-15	AC POWER CORD	T	
609	2B		E31-4599-15	WIRING HARNESS		
610	2A,2C		G11-2052-14	CUSHION		
-			H10-5151-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-5152-02	POLYSTYRENE FOAMED FIXTURE		
-			H11-0042-04	POLYSTYRENE FOAMED BOARD		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	E	
-			H25-0397-04	PROTECTION BAG	E	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-		*	H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0191-04	ITEM CARTON CASE		
611	1A		J19-2815-04	ANTENNA HOLDER		
612	2B		J19-3300-05	UNIT HOLDER		
613	1C		J19-3331-05	UNIT HOLDER		
⚠ 614	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
615	2A		K29-3960-04	KNOB(BALANCE,MIC MIXING)		
616	2A		K29-4173-02	KNOB(AI TIMER1,2 etc.)		
617	2A		K29-4175-04	KNOB(N.B.CIRCUIT)		
618	2A		K29-4176-12	KNOB ASSY(INPUT SELECTOR)		
619	2A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		
⚠ 621	1B	*	L07-0329-05	POWER TRANSFORMER	T	
⚠ 621	1B	*	L07-0330-05	POWER TRANSFORMER	E	
-			N29-0067-05	PUSH RIVET (3.5X4.5)		
A			N09-1445-05	SET SCREW (M3X8)		
B			N09-2782-05	TAPTITE SCREW (2.6X8)		
C			N86-4006-45	BINDING HEAD TAPTITE SCREW		
D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW		

K:USA P:Canada
T:England E:Europe
X:Australia M:Other Areas

⚠ indicates safety critical components

No.4

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
E			N89-3008-45	BINDING HEAD TAPTITE SCREW		
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
622	1B		T90-0136-05	ANTENNA ADAPTOR		
623	1B		T90-0173-05	LOOP ANTENNA		
624	1B		T90-0176-05	T TYPE ANTENNA		
A－522L (Singapore and France made)						
601	1A		A01-1978-01	METALLIC CABINET		
602	2A	*	A60-0122-01	PANEL		
603	2A		B03-2728-04	DRESSING PLATE		
604	2A		B10-1855-03	FRONT GLASS		
605	2A,2B		B12-0160-04	INDICATOR		
606	2A		B12-0161-04	INDICATOR		
-			B46-0122-13	WARRANTY CARD	EL	
-			B46-0143-13	WARRANTY CARD	T	
-			B58-0923-14	CAUTION CARD		
-		*	B60-0671-00	INSTRUCTION MANUAL(ENGLISH)	TE	
-		*	B60-0672-00	INSTRUCTION MANUAL(FRENCH)	E	
-		*	B60-0673-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-0674-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-0675-00	INSTRUCTION MANUAL(ITALIAN)	E	
-		*	B60-0682-00	INSTRUCTION MANUAL(ENGLISH)	L	
-		*	B60-0683-00	INSTRUCTION MANUAL(FRENCH)	L	
-		*	B60-0684-00	INSTRUCTION MANUAL(GERMAN)	L	
-		*	B60-0685-00	INSTRUCTION MANUAL(DUTCH)	L	
-		*	B60-0686-00	INSTRUCTION MANUAL(ITALIAN)	L	
⚠ 608	1C		E30-2592-15	AC POWER CORD	EL	
⚠ 608	1C		E30-2593-15	AC POWER CORD	T	
609	2B		E31-4599-15	WIRING HARNESS		
610	2A,2C		G11-2052-14	CUSHION		
-		*	H10-5212-12	POLYSTYRENE FOAMED FIXTURE	TEL	
-			H10-5213-02	POLYSTYRENE FOAMED FIXTURE	TEL	
-		*	H10-5241-02	POLYSTYRENE FOAMED FIXTURE	E	
-		*	H10-5242-02	POLYSTYRENE FOAMED FIXTURE	E	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	EL	
-			H25-0397-04	PROTECTION BAG	EL	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-		*	H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0192-04	ITEM CARTON CASE	E	
-		*	H50-0195-04	ITEM CARTON CASE	T	
-		*	H50-0196-04	ITEM CARTON CASE	EL	
611	1A		J19-2815-04	ANTENNA HOLDER		
612	2B		J19-3300-05	UNIT HOLDER		
613	1C		J19-3331-05	UNIT HOLDER		
⚠ 614	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
615	2A		K29-3960-04	KNOB(BALANCE,MIC MIXING)		
616	2A		K29-4173-02	KNOB(AI TIMER1,2 etc.)		
617	2A		K29-4175-04	KNOB(N.B.CIRCUIT)		
618	2A		K29-4176-12	KNOB ASSY(INPUT SELECTOR)		
619	2A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		
⚠ 621	1B	*	L07-0329-05	POWER TRANSFORMER	T	

K:USA P:Canada
T:England E:Europe
X:Australia M:Other Areas

S: Singapore mo
F: France mod

⚠ indicates safety critical compon

× New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No.5

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
⚠ 621	1B	×	L07-0330-05	POWER TRANSFORMER	EL	
-			N29-0067-05	PUSH RIVET (3.5X4.5)		
A			N09-1445-05	SET SCREW (M3X8)		
B			N09-2782-05	TAPTITE SCREW (2.6X8)		
C			N86-4006-45	BINDING HEAD TAPTITE SCREW		
D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW		
E			N89-3008-45	BINDING HEAD TAPTITE SCREW		
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
622	1B		T90-0136-05	ANTENNA ADAPTOR		
623	1B		T90-0174-05	LOOP ANTENNA		
624	1B		T90-0175-05	T TYPE ANTENNA		
TUNER UNIT (X05-4120-10)						
D201,202			B30-1010-05	LED(SLP-281F-50U)		
D203			B30-1012-05	LED(SLP-981C-50)		
D204			B30-1010-05	LED(SLP-281F-50U)		
D205-211			B30-1012-05	LED(SLP-981C-50)		
C1 -4			CK45FF1H103Z	CERAMIC 0.010UF Z		
C5			CE04KW1C470M	ELECTRO 47UF 16WV		
C6 ,7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C9			CC45FSL1H101J	CERAMIC 100PF J		
C10			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C11			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C12			CK45FF1H103Z	CERAMIC 0.010UF Z		
C13			CQ92FM1H153J	MYLAR 0.015UF J		
C14 ,15			CK45FF1H223Z	CERAMIC 0.022UF Z		
C16			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C17			CK45FF1H223Z	CERAMIC 0.022UF Z		
C18			CE04KW1V100M	ELECTRO 10UF 35WV		
C19			CK45FF1H223Z	CERAMIC 0.022UF Z		
C20			CE04KW1V100M	ELECTRO 10UF 35WV		
C21			CE04KW1C101M	ELECTRO 100UF 16WV		
C22			CK45FB1H471K	CERAMIC 470PF K		
C23			CF92FV1H473J	MF 0.047UF J		
C24			CC93FCH1H471J	CERAMIC 470PF J		
C25 ,26			CC45FSL1H151J	CERAMIC 150PF J	KPYMX	
C25 ,26			CQ92FM1H102J	MYLAR 1000PF J	TEL	
C27 ,28			CQ92FM1H123J	MYLAR 0.012UF J	YMX	
C27 ,28			CQ92FM1H223J	MYLAR 0.022UF J	KP	
C27 ,28			CQ92FM1H472J	MYLAR 4700PF J	TEL	
C29 ,30			CE04KW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C29 ,30			CE04KW1H2R2M	ELECTRO 2.2UF 50WV	TEL	
C31			CK45FF1H103Z	CERAMIC 0.010UF Z		
C32			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C33			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C34			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C40			CC45FSL1H221J	CERAMIC 220PF J	TEL	
C41 ,42			CC45FCH1H220J	CERAMIC 22PF J		
C43 -45			CK45FB1H471K	CERAMIC 470PF K		
C46 ,47			CK45FF1H103Z	CERAMIC 0.010UF Z		
C48			CQ92FM1H223J	MYLAR 0.022UF J		
C49			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C50			CE04KW1C470M	ELECTRO 47UF 16WV		

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No.6

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
C51			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C52			CE04KW1A470M	ELECTRO 47UF 10WV		
C53 ,54			CE04KW1C220M	ELECTRO 22UF 16WV	TEL	
C55			CK45FF1H103Z	CERAMIC 0.010UF Z		
C56			CC45FSL1H220J	CERAMIC 22PF J		
C106			CE04KW1C470M	ELECTRO 47UF 16WV		
C107			CK45FF1H223Z	CERAMIC 0.022UF Z		
C108			CK45FF1H223Z	CERAMIC 0.022UF Z	TEL	
C109,110			C91-0085-05	CERAMIC 0.022UF N	TEL	
C111-113			CK45FF1H223Z	CERAMIC 0.022UF Z	TEL	
C114			C91-0085-05	CERAMIC 0.022UF N	TEL	
C135,136		×	CQ92FM1H752J	MYLAR 7500PF J	YM	
C170			CC45FSL1H470J	CERAMIC 47PF J	TEL	
C171			CC45FSL1H101J	CERAMIC 100PF J	TEL	
C201,202			CC45FCH1H330J	CERAMIC 33PF J		
C203			CE04DW1A101M	ELECTRO 100UF 10WV		
C204,205			C91-0769-05	CERAMIC 0.01UF K		
C206			CE04CW1V2R2M	ELECTRO 2.2UF 35WV		
C209			CE04DW1H010M	ELECTRO 1.0UF 50WV		
C210			C91-0769-05	CERAMIC 0.01UF K		
C211			CK45FF1H103Z	CERAMIC 0.010UF Z		
J1	1C		E20-0321-05	LOCK TERMINAL BOARD(ANTENNA)	TEL	
J1	1C		E20-0476-05	LOCK TERMINAL BOARD(ANTENNA)	KPYMX	
J3	2A		E11-0200-05	MINIATURE PHONE JACK(PH6N0)		
CF1 ,2			L72-0531-05	CERAMIC FILTER	KPYMX	
CF1 ,2			L72-0536-05	CERAMIC FILTER	TEL	
CF3			L72-0096-05	CERAMIC FILTER		
L1			L30-0488-05	AM IFT		
L2			L30-0439-25	FM IFT		
L3			L40-1021-14	SMALL FIXED INDUCTOR(1.0mH,K)	TEL	
L5			L79-0125-05	LC FILTER	TEL	
L6 ,7			L79-0790-05	LC FILTER	TEL	
L8			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
L104			L39-0169-05	COMBINATION COIL	KPYMX	
L104			L39-0195-05	COMBINATION COIL	TEL	
L105			L39-0192-05	COMBINATION COIL	TEL	
L106			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X201			L77-1176-05	CRYSTAL RESONATOR(4.194304MHz)		
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
CP201			R90-0855-05	MULTI-COMP 100KX5 J		
CP202			R90-0878-05	MULTIPLE RESISTOR		
CP203,204			R90-0482-05	MULTI-COMP 100KX4 J 1/6W		
CP205			R90-0824-05	MULTI-COMP 4.7KX6		
CP206			R90-0482-05	MULTI-COMP 100KX4 J 1/6W		
RS3			RS14KB3D221J	FL-PROOF RS 220 J 2W		
VR1			R12-3687-05	TRIMMING POT 33K(FM T-LEVEL)		
VR2			R12-1619-05	TRIMMING POT 4.7K(VCO)		
VR3			R12-3685-05	TRIMMING POT 10K(AM T-LEVEL)		
VR4			R12-5652-05	TRIMMING POT 220K(SEPARATION)	TEL	
S1 -39	1A		S40-1064-05	PUSH SWITCH		
S101	1C		S31-2132-05	SLIDE SWITCH(VOLTAGE SELECTOR)	YM	

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No.11

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
D20 ,21			1SR139-100	DIODE		
D22			HZS6.2N(B2)	ZENER DIODE		
D22			RD6.2ES(B2)	ZENER DIODE		
D23			HZS11N(B2)	ZENER DIODE		
D23			RD11ES(B2)	ZENER DIODE		
D24			HZS16N(B2)	ZENER DIODE		
D24			RD16ES(B2)	ZENER DIODE		
D25			HSS104	DIODE		
D25			1SS133	DIODE		
D26			HZS6.8N(B2)	ZENER DIODE		
D26			RD6.8ES(B2)	ZENER DIODE		
D28			HZS4.7N(B)	ZENER DIODE		
D28			RD4.7ES(B)	ZENER DIODE		
D30 -38			HSS104	DIODE		
D30 -38			1SS133	DIODE		
D39 ,40			S5688B	DIODE		
D39 ,40			1SR139-100	DIODE		
D41 -50			HSS104	DIODE		
D41 -50			1SS133	DIODE		
D53			HZS4.7N(B)	ZENER DIODE		
D53			RD4.7ES(B)	ZENER DIODE		
D55 -58			HSS104	DIODE		
D55 -58			1SS133	DIODE		
D121-124			S5688B	DIODE		
D121-124			1SR139-100	DIODE		
IC1			NJM4565D-D	IC(OP AMP X2)		
IC1			RC4565D-D	IC(OP AMP X2)		
IC2			TA8409S	IC(MOTOR CONTROL)		
IC3			BA17815T	IC(VOLTAGE REGULATOR) +15V)		
IC3			TA7815HF	IC(VOLTAGE REGULATOR/ +15V)		
IC3			UPC7815HF	IC(VOLTAGE REGULATOR/ +15V)		
IC4			PST529C	IC(SYSTEM RESET)		
IC6			NJM4565D-D	IC(OP AMP X2)		
IC6			RC4565D-D	IC(OP AMP X2)		
IC8			NJM4565D-D	IC(OP AMP X2)		
IC8			RC4565D-D	IC(OP AMP X2)		
Q1 -6			2SA992(F,E)	TRANSISTOR		
Q7 -10			2SC1845(F,E)	TRANSISTOR		
Q11 ,12			2SC4137(V,W)	TRANSISTOR		
⚠ Q13 ,14			2SD2340	TRANSISTOR		
⚠ Q15 ,16			2SB1531	TRANSISTOR		
Q17 ,18			2SC1845(F,E)	TRANSISTOR		
Q19			2SA1123(R,S)	TRANSISTOR		
Q20 ,21			2SC1845(F,E)	TRANSISTOR		
Q22			2SC1740S(Q,R)	TRANSISTOR		
Q22			2SC3311A(Q,R)	TRANSISTOR		
Q23			2SC1740S(Q,R)	TRANSISTOR	YMXTEL	
Q23			2SC3311A(Q,R)	TRANSISTOR	YMXTEL	
Q27			2SA954(L,K)	TRANSISTOR		
Q28			2SC1740S(Q,R)	TRANSISTOR		
Q28			2SC3311A(Q,R)	TRANSISTOR		
Q29			2SD1266(Q,P)	TRANSISTOR		
Q30			2SB764	TRANSISTOR		
Q31			2SA1309A(Q,R)	TRANSISTOR		
Q31			2SA933S(Q,R)	TRANSISTOR		

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No.12

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
Q32 ,33			2SC2878(B)	TRANSISTOR		
Q35			2SC2878(B)	TRANSISTOR		
Q36			2SA1309A(Q,R)	TRANSISTOR		
Q36			2SA933S(Q,R)	TRANSISTOR		
Q37 -40			2SC1740S(Q,R)	TRANSISTOR		
Q37 -40			2SC3311A(Q,R)	TRANSISTOR		
Q41 -44			DTC124ES	DIGITAL TRANSISTOR		
Q41 -44			UN4212	TRANSISTOR		

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PARTS LIST
A-522/522L

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No.7

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
D1 ,2			HSS104	DIODE		
D1 ,2			1SS133	DIODE		
D3			HZS5.1N(B2)	ZENER DIODE		
D3			RD5.1ES(B2)	ZENER DIODE		
D4 ,5			HSS104	DIODE		
D4 ,5			1SS133	DIODE		
D109,110			HSS104	DIODE	TEL	
D109,110			1SS133	DIODE	TEL	
D111,112			HSS104	DIODE		
D111,112			1SS133	DIODE		
D113-116			HSS104	DIODE	TEL	
D113-116			1SS133	DIODE	TEL	
D120			HZS3.3N(B2)	ZENER DIODE		
D120			RD3.3ES(B2)	ZENER DIODE		
D212			HSS104	DIODE	KPYM	
D212			1SS133	DIODE	KPYM	
D212-214			HSS104	DIODE	X	
D212-214			1SS133	DIODE	X	
D212-215			HSS104	DIODE	TEL	
D212-215			1SS133	DIODE	TEL	
D214			HSS104	DIODE	YM	
D214			1SS133	DIODE	YM	
D216-227			HSS104	DIODE	YM	
D216-227			1SS133	DIODE	YM	
D217-227			HSS104	DIODE	KPXTEL	
D217-227			1SS133	DIODE	KPXTEL	
D231-234			HSS104	DIODE		
D231-234			1SS133	DIODE		
ED201	1A		FIP11AM7R	FLUORESCENT INDICATOR TUBE		
IC1			LA1265	IC(FM/AM TUNER)		
IC2			AN7470	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC201		*	CXP50116-360Q	IC(MICROPROCESSOR)		
IC202			MSM59371	IC(EXPANSION IC)		
Q1			2SC1923(R,O)	TRANSISTOR		
Q2			2SC1845(F,E)	TRANSISTOR		
Q3			2SC1740S(Q,R)	TRANSISTOR		
Q3			2SC3311A(Q,R)	TRANSISTOR		
Q4			2SC1740S(Q,R)	TRANSISTOR	TEL	
Q4			2SC3311A(Q,R)	TRANSISTOR	TEL	
Q5			2SK163(L,M)	FET	TEL	
Q5			2SK364(GR,BL)	FET	TEL	
Q102			2SA1309A(Q,R)	TRANSISTOR		
Q102			2SA933S(Q,R)	TRANSISTOR		
Q103			2SA1309A(Q,R)	TRANSISTOR	TEL	
Q103			2SA933S(Q,R)	TRANSISTOR	TEL	
Q104			2SA1309A(Q,R)	TRANSISTOR		
Q104			2SA933S(Q,R)	TRANSISTOR		
Q105,106			2SC1740S(Q,R)	TRANSISTOR	TEL	
Q105,106			2SC3311A(Q,R)	TRANSISTOR	TEL	
Q107,108			2SC1740S(Q,R)	TRANSISTOR	YM	
Q107,108			2SC3311A(Q,R)	TRANSISTOR	YM	
Q109,110			2SD1302(S,T)	TRANSISTOR		
Q111			2SA1309A(Q,R)	TRANSISTOR		
Q111			2SA933S(Q,R)	TRANSISTOR		

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No.8

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
Q201,202			2SC1740S(Q,R)	TRANSISTOR		
Q201,202			2SC3311A(Q,R)	TRANSISTOR		
Q203			2SA1309A(Q,R)	TRANSISTOR	YM	
Q203			2SA933S(Q,R)	TRANSISTOR	YM	
A1	1A		W02-1046-05	ELECTRIC CIRCUIT MODULE		
DT1	1C		W02-1041-05	FM FRONT-END ASSY	TEL	
DT1	1C		W02-1042-05	FM FRONT-END ASSY	KPYMX	
AUDIO UNIT (X09-3480-11)						
C3 ,4			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C5 ,6			CC45FSL1H101J	CERAMIC 100PF J		
C7 ,8			CE04KW1V100M	ELECTRO 10UF 35WV		
C11 ,12			CF92FV1H243J	MF 0.024UF J		
C13 ,14			CF92FV1H104J	MF 0.10UF J		
C15 ,16			CC45FSL1H101J	CERAMIC 100PF J		
C17 ,18			CF92FV1H104J	MF 0.10UF J		
C19 ,20			CC45FSL1H101J	CERAMIC 100PF J		
C21 ,22			CK45FB1H471K	CERAMIC 470PF K		
C23 ,24			C90-1851-05	ELECTRO 100UF 16WV		
C25 ,26			CC45FSL1H101J	CERAMIC 100PF J	EL	
C25 ,26			CC45FSL1H181J	CERAMIC 180PF J	KPYMXT	
C27 ,28			CC45FSL1H220J	CERAMIC 22PF J		
C29 ,30			CC45FSL1H101J	CERAMIC 100PF J		
C31 ,32			CC45FSL1H221J	CERAMIC 220PF J		
C33 ,34			CE04KW1V100M	ELECTRO 10UF 35WV		
C35 ,36			CC45FSL1H101J	CERAMIC 100PF J	EL	
C35 ,36			CC45FSL1H820J	CERAMIC 82PF J	KPYMXT	
C37 ,38			CE04KW1C220M	ELECTRO 22UF 16WV		
C39			CK45FF1H103Z	CERAMIC 0.010UF Z		
C40			CE04KW1H221M	ELECTRO 220UF 50WV		
C41			CE04KW1H470M	ELECTRO 47UF 50WV		
C42			CK45FF1H103Z	CERAMIC 0.010UF Z		
C43 ,44			CF92FV1H224J	MF 0.22UF J	EL	
C43 ,44			CF92FV1H473J	MF 0.047UF J	KPYMXT	
C45 ,46			CF92FV1H224J	MF 0.22UF J	EL	
C47			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C48			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C49			CE04KW1A101M	ELECTRO 100UF 10WV		
C53 ,54			CK45FF1H103Z	CERAMIC 0.010UF Z	EL	
C55 ,56			CK45FF1H103Z	CERAMIC 0.010UF Z		
C57 ,58			C90-1947-05	ELECTRO 5600UF 50WV		
C60 ,61			CK45FF1H103Z	CERAMIC 0.010UF Z		
C67 ,68			CE04KW1V102M	ELECTRO 1000UF 35WV		
C70			CE04KW1C470M	ELECTRO 47UF 16WV		
C71 ,72			CF92FV1H104J	MF 0.10UF J		
C73 ,74			CE04KW1C470M	ELECTRO 47UF 16WV		
C75			CE04KW1E101M	ELECTRO 100UF 25WV		
C76			CE04KW1V470M	ELECTRO 47UF 35WV		
C77			CE04KW1E471M	ELECTRO 470UF 25WV		
C79			CE04KW1V100M	ELECTRO 10UF 35WV		
C80			CE04KW1V470M	ELECTRO 47UF 35WV		
C81			CE04KW1V100M	ELECTRO 10UF 35WV		
C82			CE04KW0J222M	ELECTRO 2200UF 6.3WV		
C83			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C84			CF92FV1H104J	MF 0.10UF J		

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No.9

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
C86			CE04KW1V100M	ELECTRO 10UF 35WV		
⚠ C87			C91-1421-05	FILM 0.01UF 250AC		
C88			CE04KW1C470M	ELECTRO 47UF 16WV		
C89			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C90 ,91			CK45FF1H103Z	CERAMIC 0.010UF Z		
C95			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C96			CE04KW1C330M	ELECTRO 33UF 16WV		
C97			CC45FSL1H101J	CERAMIC 100PF J		
C98			CE04KW1A101M	ELECTRO 100UF 10WV		
C100,101			CE04KW1V100M	ELECTRO 10UF 35WV		
C102			CF92FV1H104J	MF 0.10UF J		
C103,104			CF92FV1H154J	MF 0.15UF J		
C105			CK45FF1H472Z	CERAMIC 4700PF Z		
C106			CC45FSL1H221J	CERAMIC 220PF J		
C107			CF92FV1H473J	MF 0.047UF J		
C108			CC45FSL1H221J	CERAMIC 220PF J		
C109			CE04JW1C100M	ELECTRO 10UF 16WV		
C110			CK45FB1H102K	CERAMIC 1000PF K		
C111			CE04JW1C100M	ELECTRO 10UF 16WV		
C112			CE04JW1V100M	ELECTRO 10UF 35WV		
C113			CE04JW1H0R1M	ELECTRO 0.1UF 50WV		
C114			CE04JW1H4R7M	ELECTRO 4.7UF 50WV		
C115			CE04JW1C100M	ELECTRO 10UF 16WV		
C116			CE04JW1H010M	ELECTRO 1.0UF 50WV		
C117			CK45FF1H472Z	CERAMIC 4700PF Z		
C118			CK45FF1H103Z	CERAMIC 0.010UF Z		
C120			CK45FF1H103Z	CERAMIC 0.010UF Z		
C124,125			CE04KW1C470M	ELECTRO 47UF 16WV		
C128,129			CC45FSL1H121J	CERAMIC 120PF J		
C130			CK45FF1H103Z	CERAMIC 0.010UF Z	EL	
C133			CK45FF1H103Z	CERAMIC 0.010UF Z		
C134			CE04KW1H010M	ELECTRO 1.0UF 50WV		
J1	1C		E08-1508-05	RECTANGULAR RECEPTACLE(RED)		
J3	1C		E20-0459-05	LOCK TERMINAL BOARD(F.SPEAKER)		
J4	1C		E63-0027-05	PHONO JACK(SURROUND SPEAKERS)	YMXTEL	
J5	1C		E63-0017-05	PHONO JACK(SUPER WOOFER)		
J8	2C		E11-0220-05	MINIATURE PHONE JACK(MIC)		
⚠ F1			F05-1623-05	FUSE (SEMKO) (250V T1.6A)	YM	
⚠ F1			F05-4026-05	FUSE (UL) (125V 4A)	KP	
⚠ F2			F05-1623-05	FUSE (SEMKO) (250V T1.6A)	YMXTEL	
⚠ F3 -5			F53-0006-05	FUSE (125V 2A)	KP	
⚠ F3 -5			F53-0042-05	FUSE(SEMKO) (250V T2A)	YMXTEL	
⚠ F6			F53-0010-05	FUSE (125V 4A)	KP	
⚠ F6			F53-0044-05	FUSE(SEMKO) (250V T4A)	YMXTEL	
CN18,19			J13-0075-05	FUSE CLIP	YMXTEL	
CN20,21			J13-0075-05	FUSE CLIP	KPYM	
L1 ,2			L39-0085-05	PHASE-COMPENSATION COIL		
⚠ T1	1B		L07-0332-05	POWER TRANSFORMER	KP	
⚠ T1	1B		L07-0333-05	POWER TRANSFORMER	XT	
⚠ T1	1B		L07-0334-05	POWER TRANSFORMER	EL	
⚠ T1	1B		L07-0335-05	POWER TRANSFORMER	YM	
F			N89-3008-46	BINDING HEAD TAPTITE SCREW		
G			N09-0333-05	TAPPING SCREW (3X12)		

L:Scandinavia K:USA P:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFES(Europe) X:Australia M:Other Areas

⚠ indicates safety critical components.

× New Parts.
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

No.10

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名/規格	Destination 仕向	Remarks 備考
H			N35-3008-46	BINDING HEAD MACHIN SCREW		
CP1 ,2			R90-0187-05	MULTI-COMP 0.22X2 K 5W		
R25 ,26			RN14BK2C1960F	RN 196.0 F 1/6W		
R27 -30			RN14BK2C1472F	RN 14.7K F 1/6W		
R31 ,32			RD14NB2E151J	RD 150 J 1/4W		
R33 ,34			RD14NB2E222J	RD 2.2K J 1/4W		
R35 ,36			RD14NB2E181J	RD 180 J 1/4W		
R37 ,38			RD14NB2E151J	RD 150 J 1/4W		
R47 -50			RD14NB2E4R7J	RD 4.7 J 1/4W		
R51			RD14NB2E221J	RD 220 J 1/4W		
R52			RD14NB2E101J	RD 100 J 1/4W		
R59 ,60			RS14KB3D100J	FL-PROOF RS 10 J 2W	KPYMXT	
R59 ,60			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W	EL	
R63 ,64			RS14KB3A561J	FL-PROOF RS 560 J 1W		
R73			RD14NB2E1R0J	RD 1.0 J 1/4W		
R87			RD14NB2E1R0J	RD 1.0 J 1/4W		
R88			RD14NB2E4R7J	RD 4.7 J 1/4W		
R89			RS14KB3D330J	FL-PROOF RS 330 J 2W		
R91			RS14KB3D120J	FL-PROOF RS 120 J 2W		
R92			RS14KB3A470J	FL-PROOF RS 47 J 1W		
⚠ R134			R92-0173-05	RC 2.2M M 1/2W	KP	
R147,148			RD14NB2E221J	RD 220 J 1/4W		
R150,151			RD14NB2E471J	RD 470 J 1/4W		
R175			RS14KB3D331J	FL-PROOF RS 330 J 2W		
VR1	2C	*	R29-5060-05	POTENTIOMETER(VOLUME CONTROL)		
VR2	2C		R11-9021-05	POTENTIOMETER(N.B.CIRCUIT)		
VR3	2C	*	R05-5046-05	POTENTIOMETER(BALANCE)		
VR4	2C		R10-5044-05	POTENTIOMETER(MIC MIXING)		
K1			S51-2078-05	MAGNETIC RELAY		
K1			S51-2092-05	MAGNETIC RELAY		
K1			S76-0005-05	MAGNETIC RELAY		
K2			S51-2078-05	MAGNETIC RELAY	YMXTEL	
K2			S51-2092-05	MAGNETIC RELAY	YMXTEL	
K2			S76-0005-05	MAGNETIC RELAY	YMXTEL	
⚠ K4			S76-0002-05	MAGNETIC RELAY		
⚠ S1			S31-3010-05	SLIDE SWITCH(VOLTAGE SELECTOR)	YM	
D1 -4			HSS104A	DIODE		
D1 -4			1SS131	DIODE		
D5			HZS5.1N(B2)	ZENER DIODE		
D5			RD5.1ES(B2)	ZENER DIODE		
D6			HSS104A	DIODE		
D6			1SS131	DIODE		
D9			HSS104A	DIODE		
D9			1SS131	DIODE		
D10			HSS104A	DIODE	YMXTEL	
D10			1SS131	DIODE	YMXTEL	
⚠ D12			D5SBA20F03	DIODE		
⚠ D12			RBV-602LFA	DIODE		
D16			HZS16N(B2)	ZENER DIODE		
D16			RD16ES(B2)	ZENER DIODE		
D17 -19			HSS104A	DIODE		
D17 -19			1SS131	DIODE		
D20 ,21			S5688B	DIODE		

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